

Dead Tired Behind the Wheel

BOB VAN ELSBERG Managing Editor

had put around 800 miles behind me already, but still had more than 400 to go to get back to my unit by the next morning. However, I was young, healthy and enjoyed driving. I thought all I had to do was to keep drinking coffee and keep the car "between the lines" as truck drivers like to say.

However, it was getting dark. All the visual stimuli — road signs, pretty countryside, etc. — that had helped keep me alert during the day were fast fading. As I drove into the night, I began "seeing things." I "saw" people walking across the road in front of me, so I hit my high beams and slowed down. But it was nothing more than my imagination. Later I was startled to "see" the tail lights of an 18-wheeler which appeared to be stopped in the road ahead. I slammed onto the brakes and swerved into the next lane. I was shocked when I realized the "lights" weren't tail lights at all just stars low on the horizon ahead.

Deciding that I would rather be AWOL than dead, I got off at the next offramp and found a place where I could park and take a nap. I woke up to a policeman's flashlight shining through the window. I explained what I was trying to do drive more than 1,200 miles straight through from San Diego, Calif., to Seattle, Wash. He just shook his head in disbelief.

Later I realized I had experienced the phenomena called "highway hypnosis." I had tried to pack too many miles into too few hours. I was lucky I didn't pay for it with my life.

During the past 12 months many Air Force members have been much less fortunate. We've had a number of people injured and at least one fatality from fatigue-related driving mishaps. To avoid becoming a mishap report in the Safety Center files, try the following risk reduction tips from the Automobile Club of Southern California.

- Get at least five hours of sleep before hitting the road. Being even a little tired can slow your reactions to highway hazards.
- Use extra caution if you must drive between 2 a.m. and 6 a.m.
- Pack early enough before a trip to allow for a normal night's sleep.
- Avoid drugs that cause drowsiness. Remember, alcohol is a depressant and will make you sleepy.
- When driving, keep your eyes moving from the left side of the road to the right. Also, periodically focus on an object that is near, then focus on one that is further away.
- Stay alert. Decide ahead of time how to react to possible dangers or driving situations.
- Try to limit yourself to driving 300 to 400 miles per day to avoid driving while fatigued.

As you drive, watch out for the following warning signs that fatigue is setting in:

- Your eyes close by themselves.
- You find it difficult to pay
- You frequently yawn.
- You find yourself frequently swerving in your lane.

If you experience any of these symptoms, you are in danger of falling asleep at any moment. There are three basic antidotes to drowsy driving sleep, exercise, and caffeine:

- Take a nap even 20 minutes will help.
- Get some exercise to increase your alertness. Try running or walking while waving your arms.
- Consume caffeine it can provide an extra boost.

Remember, good risk reduction can save your life! ■



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BOB VAN ELSBERG Managing Editor

walked out of the peanut field and followed a path down into a wooded area in hopes of scaring up a rabbit. I'd only gone a short distance when I heard several dogs barking and snarling. I looked up and to my left and whill ran through me. About 25 or 30 feet away stood a pack of dogs. I was obviously the center of their attention.

I was particularly worried because the farmer on whose land I was hunting had lost several sheep to attacks by stray dogs. He'd shown me their handiwork — a pile of bloody carcasses that weren't even eaten. The dogs had killed the sheep for sport.

























I tensed as I watched the dogs closely. Soon one ran down the hill-side at me, stopping a few feet away with his ears laid back, teeth bared and snarling. He was obviously the leader of the pack. Having read that feral (stray domestic) dogs kill more people every year than bears or other wild animals, I knew I had to watch him.

I slowly began to walk backwards up the path, hoping he would also back off and the confrontation would be over. Suddenly he dashed out in a large circle toward my right. I'd seen this kind of attack before. He would attack from behind while the other dogs attacked from in front.

I snapped my double-barrel 20 gauge shotgun to my shoulder and fired one shot. The blast caught him broadside at a range of maybe 35 feet, killing him instantly. The other dogs ran down and sniffed his body, decided I wasn't easy prey and ran off.

I continued back up the trail, keeping a close eye on the woods around me. Afraid the dogs might suddenly appear again, I unsnapped the holster on my .22 pistol. I would have preferred to reload the fired barrel of my shotgun, but I didn't want to disable the gun for the few seconds that would have taken.

Fortunately, the dogs never came back. I walked out of the woods and into the middle of the peanut field. There, at least, I would have a clear view all around me and I could finally breathe easier. I was alive and, in protecting myself, had done the farmer a favor.

That incident was the only time I have ever had to shoot in self defense. Since then I have rescued several stray dogs dumped off by irresponsible owners. However, I have never lost my respect for what a dog — particularly a large one — can do when behaving aggressively. Here are some tips from a 1991 *Road & Rec* article that may help keep you from becoming "dog chow."

- Avoid going onto private property unless invited.
- When confronted with a threatening dog, do not run. This only increases the dog's aggressiveness.
 - Hold your ground. Demonstrate

moderate dominance by firmly telling the dog to "go home," "no," or "sit."

- Avoid direct eye contact, which the dog interprets as a challenge. Instead, act as if you do not care.
- When the dog begins to back away, slowly retreat also, keeping the dog in view without appearing to pay much attention to it. If the dog begins to come back, stop and wait until it moves off again.
- Do not try to outrun a dog on a bicycle. Stop, dismount, and stand with the bicycle between you and the dog. Without something to chase, the dog may lose interest.
- Do not try to pet a strange dog especially if it is roaming about freely.
- Do not be embarrassed to tempon a car, climb a tree, or call for help if you feel threatened.
- Do not be embarrassed to ask a dog owner to restrain the dog until it recognizes you as a friend.
- Avoid any encounters with trained guard dogs.
- If threatened by a trained guard dog, take off your jacket or find something handy to give to the dog to bite or pull on. This might spare you from being bitten.
- If you cannot deflect the attack, roll up into a ball, protect your face and hands with clenched fists, and wait for help or until the dog calms down. You may be able then to walk away very slowly.
- Report all aggressive uncontrolled dogs or incidents of actual dog bites.

Once Bitten

Here are some tips if you should be bitten by a dog:

- If you're bitten by your own dog, wash the wound with soap and water. Seek medical help to evaluate the severity of the wound and to prevent infection. Immediately confine the dog and call your veterinarian to check its vaccination records.
- If you are bitten by someone else's dog, treat the wound as described above. Then contact authorities (police, animal control) and give them as accurate a description of the animal as possible and, if you know it, provide the owner's name.







































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Photos by Bob Van Elsberg

ha-time to "thread the needle" again I thought, as I scanned the curve in the road ahead. Concrete siding on my left eliminated most of the road shoulder while a Winnebago-sized RV ate up the lane to my right. I glanced over at my

wife in the passenger seat and thought smugly, "Now a tight spot like this would make her really nervous—but

NOT I—I drove in Germany for five years. In the land of the Big Schnitzel, you ain't even close until you've swapped paint!"

Unlike Germany where I drove cars with manual steering, I'd been spoiled for the past five years by the power steering in my compact truck. The slightest touch caused the truck to maneuver precisely. As I entered the corner with the RV on my right, the steering wheel would barely budge. Suddenly my light-handed hold on the wheel turned into a white-knuckle death grip! Watching the space between my truck and the RV rapidly diminishing, I "muscled" the wheel to the left. My truck slowly returned to the center of the lane and away from the immediate danger.

"Whew," I thought—noticing my heart was beating at its max aerobic pace—"that was SOME wind gust." As I settled down, I calmed myself with the

thought I'd been hit by one of those 50 mph-plus wind gusts we get out here in the spring. However, just for good measure I wiggled the steering wheel, noting that I could steer from side to side in my lane without undue effort.

Still trying to convince myself nothing was wrong, I headed down I-25 then took the off-ramp onto Highway



Periodically check your engine belts for cracks — a sign the belt should be replaced soon.

47. This required a bit more turning than just wiggling from side-to-side in my lane. As I turned onto the offramp and made the sweeping "S" turn onto Highway 47, I knew something was wrong. I had to turn the wheel as hard as I could just to stay in my lane. There was a gas station nearby where I'd planned to stop anyway, so I pulled in and lifted the hood.

"Hmmm—maybe I'm low on power steering fluid" I thought, as I unscrewed the cap and checked the fluid level. However, the fluid was right up to the full mark on the measuring stick. I looked at the front of the engine and located the power steering pump. When I found it,

the problem was obvious—the belt for the power steering pump was gone. Further examination showed two more bare pulleys—the drive pulley on the front of the engine and a tensioner pulley. Recalling all of the aggravating experiences I'd had in the past replacing various engine belts, I wasn't looking forward to this repair job. Still, I was grateful that we hadn't ended up in the hospital and that it wasn't the alternator belt. At least we could make the 15-minute drive to our hometown. There I could buy a replacement belt, then spend an intriguing hour or so figuring out how to put it on and adjust it.

I was chagrined, however, by the thought I could-and really shouldhave avoided this minor breakdown. I HAD noticed an occasional squealing under my hood during the past month or so. However, I really hated replacing belts. Mounting and properly tightening

a new belt always seemed to take more hands than I had. Besides, it was easier to dismiss the squealing as dust getting on a belt from the frequent windstorms we have here. To be honest, I'd preferred to fool myself into thinking nothing was wrong rather than perform a necessary maintenance chore.

After spending \$5.09 for a new belt, I set about the task



Look for "feathering" or chunks missing from the belt.

of installing it. My owner's manual, helpful on other maintenance tasks in the past, offered no suggestions. Eyeballing the problem and grabbing some wrenches, I finally figured out how to loosen the manual belt tensioner and mount the new belt. After a little adjusting and a 20minute run-in to get rid of the "new belt" squeal, I was back in business. Still, this was a task I should have performed BEFORE a broken belt made it necessary.

You don't have to make my mistake and be caught off guard by the sudden failure of your power steering, air conditioner, or alternator. In fact, there are some simple checks you can do to avoid such nasty surprises on the road, according to Richard Voccio Sr., owner of VO-C-O's Automotive in Albuquerque.

"Usually on 'V-belts' (the older style of belt designed to fit onto grooved pulleys) you'll see cracks and 'feathering'-small pieces missing from the inside of the belt—when the belt is worn out," he said. "Normally, that occurs when the belts are about 3 to 4 years old. However, they can wear out quicker in dry climates."

He added that a belt will often begin to squeal as it gets loose from wear. He pointed out that many people will try to eliminate that symptom by spraying belt dressing on the belts and pulleys. While that may temporarily eliminate the squeal, it only hides the real problem-the need to either replace the belt or adjust its tension, Voccio said.

Replacing all of the belts-and many older vehicles have two or three-can be a chore best left to a mechanic, he advised. He added, however, that do-it-vourselfers with a little mechanical experience can often handle an emergency belt replacement.

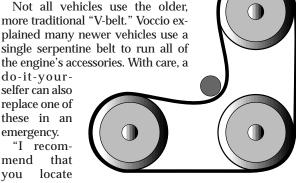
Typically, the biggest challenge involved in removing the old belt is getting enough slack in it to slip it off the pulleys. This often involves loosening the mounting bolts for whatever accessory the belt runs to, then canting that accessory toward the engine. With some vehicles there is either a spring-loaded or manually adjustable belt tensioner that makes this task much easier. Using the proper tools, these tensioners can be adjusted to loosen the belt so that it can be slipped off the pulleys.

Voccio stressed that cleaning the pulleys before mounting the new belt is important so that the belt will have a good surface to go onto. And the new belt should be gently slipped onto the pulleys—not forced on with a screwdriver or some other prying device. Then the accessory is canted away from the engine to get the proper tension and the mounting bolts tightened. If the vehicle has manually adjustable tensioners this chore is even easier. The adjustment is simply turned in the opposite direction than when the belt was removed to set the proper tension.

And setting the "proper tension" is very important, said Voccio. He explained that putting too much tension on a belt can damage the accessory by putting an excessive load on its bearings. Doing the opposite—putting too little tension on the belt-will allow it to slip and wear out prematurely. Although there is a tool you can use to check the tension, Voccio said that people do this by simply twisting the belt. He explained that if the belt can be twisted 90 degrees, then it is under the proper tension.

plained many newer vehicles use a single serpentine belt to run all of the engine's accessories. With care, a do-it-yourselfer can also replace one of these in an emergency.

"I recommend that you locate the tensioner (normally spring



Example of a "Serpentine" belt.

loaded) then, depending on whether it uses a socket or special fitting, use the proper tool to apply pressure in the opposite direction to how the spring works," he said.

Lessening the tension will allow the old belt to be removed. However, Voccio stressed, it is crucial to remember how the belt was routed. "Make sure that you look at a routing sticker or draw a picture of the belt routing." He explained that some pulleys are designed to turn in only one direction. Routing the belt improperly could cause a pulley to turn in the wrong direction and overheat the accessory.

Voccio added the following important tips for owners having belts replaced:

- 1. If you have to replace one V-belt, replace them all. Chances are they are all badly worn and in need of
- 2. Replace your V or serpentine engine accessory belt(s) whenever you replace your timing belt. Replacing the timing belt normally requires removing the accessory belt, so replacing it then will avoid any additional labor charge.
- 3. If you must manually adjust the belt's tension, install the belt, set the tension, then check it after running the engine long enough for the belt to warm up. It's normal for a new belt to squeal until it warms up and wears-in. This, however, should stop after the first 15 or 20 minutes. If the belt continues to squeal, increase the belt tension.
- 4. Save your old belts in case you break down on the road and need a replacement. An old belt is better than none at all and can help you get to a service station or parts store where you can get a proper replacement.
- 5. Check the accessory itself and make sure it's still working. Sometimes belts fail because the accessory is worn out and the pulley won't turn. ■

Editor's Note: Most vehicle owners will find it easier and within the range of their budgets to have a mechanic replace these belts. It's important to note that these belts are normally only inspected, not replaced, during recommended scheduled maintenance. Because of that, owners NEED to inspect these belts themselves. For example, the author's belt broke between 30,000-mile scheduled maintenance inspections.

No Shortcuts to La

Information provided courtesy Safety Times

"Hmm...what's this pesky piece of tape doing stuck under my lawn mower? I'd better stop mowing and get it out before it causes any problems."

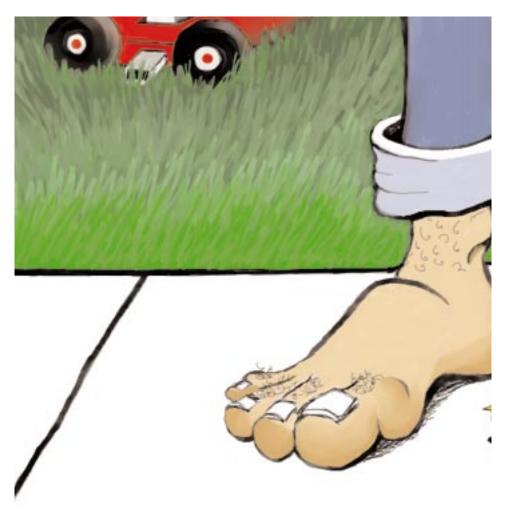
Our hero let's loose the mower's handle, theoretically activating the kill switch that **should** cause the engine to stop running.

Stepping around to the left side of the mower, he grabs the piece of tape with his left hand, then takes hold of the mower deck with his right. Sticking his middle and ring finger underneath the deck to get a better grasp, he lets out a loud "ee--yowww!" As it turns out, the "whirling blades of death" were still spinning. Our hero loses a fingertip and earns a week of quarters.

The mishap described above actually happened to an Air Force member a couple of summers ago. He learned an important lesson the hard way, joining more than 80,000 others who end up in emergency rooms each year with lawn mower injuries.

General Precautions

- Buy a mower with a kill switch that stops the engine when you release the handle.
- Read the owner's manual thoroughly. Review the operating instructions each year.
- Get your mower serviced by a professional before each cutting season.
 - Leave all safety features intact.
- Know how to start and stop the mower safely.
- Invest in good safety glasses, especially when using side-discharge mowers and lawn trimmers.
- Wear long pants and heavy-duty shoes with non-slip soles and steel toe protection. Consider wearing shoes with cleats if you have to mow terraces.



Bare Feet—E

- If possible, mow in dry conditions and daylight.
- Before starting the mower, walk around and pick up any roots, sticks, wires or toys in your path.
- Cut the difficult or hilly areas of the yard first while you are fresh and your concentration is at its peak.
- Never leave the mower unattended while the engine is running.
- Stop mowing when a person or pet is in the immediate area.
- Do not operate a lawn mower when you are tired or under the influence of alcohol or medication.
- Avoid distractions such as ear phones.
- Never cross driveways or paths with the blade rotating. The blade can pick up and throw rocks.

.awn Mower Safety



-BAD Idea!

- To clear a clogged discharge chute, turn off the engine, then use a stick.
- If the blade strikes an object, shut down the mower and examine it for damage. Before checking the blade, remove the spark plug wire if it is accessible.
 - Be very careful when refueling:
 - Fill the tank outdoors. Put in
- enough gasoline to perform the job without having to refuel. If you have to refuel, take a soda break and let the engine cool.
- Rinse any spilled gasoline off the mower before starting the engine.

Junior Wants To Cut The Grass

Determining when a child is old

enough to safely handle a lawn mower is a major decision. As a minimum, the child should be able to read and understand the owner's manual and be big enough to operate the controls and manage the mower. The child should also show the maturity needed to safely handle potentially dangerous equipment. Supervise several jobs before letting the child do the job on its own.

On The Green

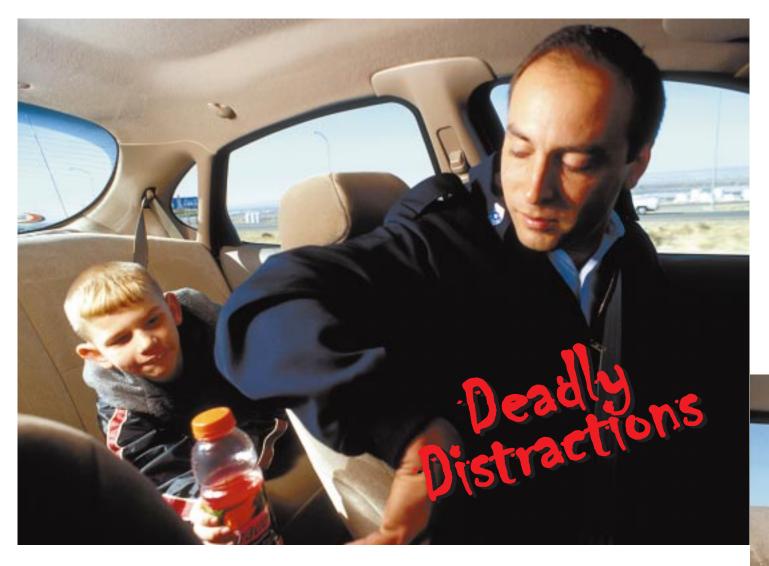
Walk-Behind Rotary Mowers

- Don't mow up and down an incline, mow across it instead.
- Keep the mower flat when cutting.
- Push the mower; pulling it increases the risk that you might slip and pull it over your foot.

Riding Mowers

Nearly 14,000 people are injured each year by riding lawn mowers, including more than 2,000 children under the age of 15. So, don't carry passengers — especially small children — on a riding mower. Make sure they're indoors and supervised while you're mowing.

- Always start the machine from the operator's seat, not while standing beside the mower.
- Slow down at corners, blind spots, and when descending hills.
- Watch for holes, ruts, bumps, and sprinkler heads obscured by
- Don't mow in reverse. If you must back up, disengage the blade then proceed with caution.
- On a slope: If the tires slip, then the slope is too steep. Disengage the blade and move slowly straight down the slope.
- Mow up and down on gentle slopes. Never mow across the slope because a riding mower's high center of gravity could cause it to tip.
- If you have any concerns about tipping or losing control of your riding mower, stay off the slope.



BOB VAN ELSBERG Managing Editor

Photos by MSgt Perry J. Heimer

couldn't believe it! I looked in my rearview mirror and was shocked to see a driver riding my back bumper at 55 mph and plucking her eyebrows. She had the visor pulled down so she could see a mirror on the backside and was hard at work with a pair of those little eyebrow tweezers. I thought, "If I have to suddenly jump on the brakes, her nickname's gonna be 'One-eyed Sue.'

Fortunately, nothing unexpected happened and "Sue" got home (as far as I know) with both "headlights" intact. However, there are many other "distracted drivers" on the highway. They go by reading the newspaper, eating, shaving, playing with a baby and yakking on the phone. And these distractions aren't harmless - not when the driver is aiming a 2,000 pound missile down the road.

How big of a problem is distracted driving? According to the National Highway Traffic Safety Administration, it plays a role in one of every six traffic deaths. In fact, federal studies show that careless or inattentive driving causes more highway accidents than any other factor.

Pay Attention!

Driving is a complicated task, one that demands your attention. But let's be honest, there will always be some distractions in a busy world. Here are some tips to lessen the odds that you'll end up as "highway hash":

- Drive defensively. Make it your goal to have a safe trip from the moment you get behind the wheel.
- Space gives you time to react, so stay at least three seconds behind the car ahead. Increase that distance after dark and during bad weather.
- Watch the road ahead. Don't take your eyes off the road to talk to a passenger or eyeball the local scenery. Also, avoid the temptation to slow down and gawk at

highway mishaps unless you want to become one.

- Don't fool with the radio or fumble around for a CD or tape when you're "in traffic." Also, if you're in an unfamiliar area, turn off the radio so that you can concentrate better.
- If you don't know exactly where you're going, call and get precise directions.
- If you need to look at a map, get something out of a purse or briefcase, or deal with an unruly child, pull over and stop.
- Headphones and loud radios can block out sounds you need to hear - like sirens and train whistles - and keep you from reacting in time.
- Being sick is a distraction. When you're not feeling well, your reactions are slower than normal and your senses may be dulled. Consider staying home unless you just have to drive.
- Read the labels on your medications and talk to the pharmacist. Many medications, such as antihistamines, can make you dizzy or drowsy.

Car Phones

As convenient as they are for business and safety, car phones tend to be a major distraction for drivers. Here are some safety tips from the Cellular Telecommunications **Industry Association:**

- Be familiar with the way your phone works.
- Position the phone so that it is easy to see and reach.
- Have the phone installed by a dealer for the best sound quality.
 - Use a hands-free phone.
- Use speed dialing for for frequently dialed numbers.
- Dial while the vehicle is stopped. If you absolutely must dial in light traffic, dial a few numbers, check traffic, and continue dialing when it is safe. Or, as an alternative, have a passenger dial for you.
 - Never take notes while driving.
- Allow voice mail to answer the phone when it's unsafe to speak.
- The National Safety Council recommends not using a car phone at stoplights. You may notice cars moving in the next lane (such as on a protected arrow for a left turn) and pull out while your light is still red. ■

Note: DoDI 6055.4, which addresses driving safety, advises that drivers who use cell phones or global positioning systems should, when possible, pull over and stop when using these devices to avoid having an accident.



Can you really afford to divide your attention between reading and driving when you're going down the road?

Tires That Protect and Tires That Kill

BOB VAN ELSBERG Managing Editor

Photos by MSgt Perry J. Heimer

Almost Bullet-Proof Tires

Ever feel like your tires are a magnet for nails? I was beginning to feel that way recently when I got my second flat in as many weeks. Maybe it's the price I pay for living in a new subdivision with a lot of construction going on. However, it sure is irritating.

As I was waiting to have my second flat patched, Jr. Craig, store manager for Craig Independent Tire Company of Peralta, N.M., showed me something that made a whole lot of sense -- a self-sealing tire produced by one of America's tire makers.

It was marvelous in its simplicity. All around the inside of the tread portion of the tire was a thick coating of rubber sealant. It was just tacky enough that I could stick my finger in it and leave a faint print. However, it wasn't so sticky that it pulled away when I drew my finger back.

leaking. When the tire technician removed the tire from the rim, he found two things. First, the leak was caused by damage to the sidewall - a part of the tire not protected by the sealant. Second, there were **NINE** nails in the tread, all of which were perfectly sealed against the loss of air pressure from the tire.

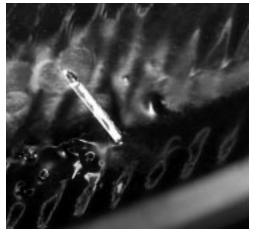
I was impressed. It only took a screw and a nail to send me to the tire repair shop twice in two weeks. Sure, it's not that expensive or time-consuming to get a flat fixed, but who wants the inconvenience? Also, who wants to change a flat in the middle of the desert (which I nearly had to do when I got the screw in my tire), or in one of the less desirable parts of town? How much better it would be not to have to worry about these things.

Run-flat tires — heavily advertised last year as the answer to this problem — have not done well in the marketplace for a number of reasons. They — and the monitoring



An unwelcome sight - a nail sticking out of

As simple as it is, the sealant works quite well in practice, according to Craig. One of his customers, a lady who put a set of these tires on her car, came in one day because a tire was



Although the nail punctured the tire, the sealant would have prevented any loss of air.

systems they require — are very expensive. In addition, run-flat tires have much stiffer sidewalls than normal tires, which means they tend to transmit every bump on the road



into an uncomfortable jolt inside the car. While some performance car drivers don't mind this, most owners of family cars don't appreciate the loss of comfort. Also, run-flat tires only work for a limited distance after losing tire pressure, so you're still looking for somewhere to get it fixed. And there is the final rub — if a tire repairman isn't familiar with the sensors used with run-flat tires, he can easily destroy one while repairing a flat, leading to another expensive repair.

Self-sealing tires are not a new idea. However, in the past it was difficult to develop a sealer that wouldn't eventually settle at the bottom of the tire. That problem has now apparently been overcome — and for a cost increase of only about \$10 over the price of a normal tire. ■

Cruisin' For A Bruisin'

Ever see a chihuahua chasing a German shepherd? Well, that's just about as dumb as an automobile tailgating an 18-wheeler. Yet every week I see car drivers who either think they can intimidate a diesel or are so impatient they'll tailgate anything.

There can be an ugly price to pay for such foolishness according to Ed Goza, a 43 year veteran professional truck driver.



This can be more dangerous than you think.

He explained, "People don't realize what can happen if one of our rear duals (trailer tires) blows. If that tire comes apart and there is a car right behind, it can throw a chunk of the tread right through the windshield!"

He knows — he has seen it happen.

"The worst instance I can remember happened to a family in a minivan on I-40 near Gallup, N.M.," he said. "They were about 30 feet behind a semi when the right rear tire blew out and a large chunk went straight through the windshield. It killed the driver's wife and badly injured the driver. I was behind them and saw the van go off the road, so I pulled over to see if I could help. I had a blanket and gave it to the man to cover his wife. She had terrible head injuries — it just about took her head off. She died instantly."

Being directly behind an 18-wheeler isn't the only place car drivers shouldn't be, according to Goza. Pointing out that big rigs have blind spots where their drivers can't see an automobile, he explained that motorists should avoid driving beside trucks.

"If they're going to pass a truck, they need to get in the left lane and do it quickly. They shouldn't linger alongside."

Eagle-Eyed Readers!

A number of our readers contacted us to let us know we had a contradiction in our spring issue. In the story titled, "From Battery to Bomb in One Easy Blast," readers were advised to first clamp the positive (red) jumper cable onto the positive post of the *dead* battery. In a photo accompanying the story, the caption advises readers to first hook the positive jumper cable onto the positive post of the *good* battery.

In fact, either approach is acceptable. The method recommended in the article was suggested by the National Highway Traffic Administration. The method mentioned in the photo caption was suggested by the American Automobile Association. Having been a member of AAA since wheels had wooden spokes, the editor typically uses AAA's system. Since the editor posed for the photos, old habits kicked in and he showed the hook-up sequence as he learned it from AAA.

The KEY issue is to avoid hooking the negative jumper cable to the negative post of the dead battery. Because this almost always results in sparking, there is a real danger of igniting the oxygen and hydrogen gasses coming off the battery and causing an explosion. To avoid that danger, drivers should hook the negative jumper cable onto the engine block or some other metal part as far from the dead battery as possible.



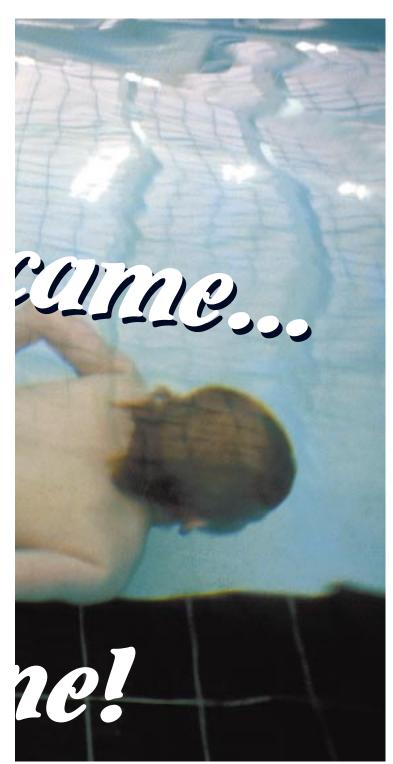
BOB VAN ELSBERG Managing Editor

Photos by MSgt Perry J. Heimer

hen I was a kid my cat and I had one thing in common — we both hated water! I didn't want to sit in it, stand in a shower under it, or most of all, get

in water above my head. However, it was summer and my dad told me that I WAS taking swimming lessons. Since he was twice my size and could flick a fly off the wall with his belt, my options were, well... "limited."

The appointed — and much dreaded — day came. I found myself at the local pool with a lot of other youngsters also slated to take the swimming course. The instructor assured us there wouldn't be any real danger and that this would be a lot of fun. "Yeah - right!" I thought. "If I was supposed to be in the water, I'd have gills!" At that moment I would have



gladly swapped his idea of fun for getting a filling WITHOUT novocaine.

With much coaxing however, I finally eased into the water, moved away from the edge of the pool and tried a back float. It took a few tries and I wasn't graceful, but I didn't go to the bottom either. After mastering the dead man's float at the shallow end of the pool, I began to feel a bit more confident. Maybe I could learn to swim after all!

Once the entire class had proven they could

float, the instructor introduced us to the belly board. The point of the whole thing, he explained, was to let the board keep us afloat while we used our legs to practice a kick he'd shown us. The idea was to actually go somewhere in the water.

This seemed reasonable to me until he showed us that he wanted us to get in at the 6foot-deep mark. I was no mathematical genius, but even I knew 6-footdeep water was well over my head. Deciding of the board... I needed lots of time to



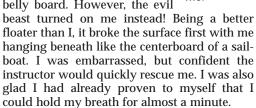
I was supposed to stay on TOP

observe others mastering this task, I made sure I was LAST in line. When my time came, I stood there like I'd been frozen in-place. The instructor told me I could do it whenever I got ready, then went about instructing the other students in the next phase of their training.

Realizing that I HAD to complete the training or go home and explain to dad "why," I hugged the board tightly and jumped into the pool. I might have made it had I not been an uncommonly uncoordinated child. Somewhere between the time my feet left the deck and the board hit the water. I made a 90 degree snap roll to the left.

This was not what I had in mind. I'd envisioned myself making my way across the pool

floating triumphantly atop the belly board. However, the evil



So I hung there and waited...and waited...and waited. As my lungs reached the bursting



But, the 'evil beast' turned on me.

continued on next page



When I could no longer hold my breath, I gasped then felt myself relax as I drifted to the bottom of the swimming pool.

point, I realized with terrifying certainty that I wasn't going to be rescued. It was a horrible feeling to be hanging there helpless. Finally, I couldn't hold my breath any longer. As I gasped I felt the water rushing into my throat. Suddenly, nothing mattered anymore. I wasn't scared and I wasn't in any pain. I relaxed, let go of the board, then began drifting downward. Then everything

To this day, I have no idea how long I was on the bottom before the instructor pulled me out. I woke up lying on the concrete next to the pool and spitting up a lot of water — like half of the swimming pool!

Needless to say, my swimming lessons were over for the day. However, I learned some very important lessons that I have never forgotten.

First, if you have a child who can't swim in the pool, you can't afford to be distracted for even a moment. In the time it takes to answer the phone or grab a soda from the fridge, a child can be in serious trouble.

Second, belly boards, inflatable toys and plastic tubes are no substitute for being able to swim. Just because pool toys float doesn't mean they can be trusted to keep a non-swimmer safe in the water.

Since my unpleasant experience as a kid, I have learned to swim - thanks to basic training in the Coast Guard. There my instructors watched me closely to make sure that I didn't do any more submarine impersonations. They also kept on hand some basic pool safety equipment such as a 12-foot-long pole and a life ring with a rope attached. More than once I had to rely on that pole while in the deep end of the pool.

I can tell you from firsthand experience that drowning is a terrifying experience. It's something you never want to happen to someone you love.

Some Swimming Pool Safety Tips

- * Keep a telephone at poolside. It'll be there if you need it for an emergency and you won't have to leave the pool to answer a call.
 - Decks should be kept clean and free of debris.
 - Have a ladder at each end of the pool.
- Don't allow electrical appliances into the pool area unless they are protected by a ground fault circuit interrupter (GFCI).
- The water depth should be clearly marked on the pool deck and, if possible, above the water line of the pool wall.
- Install a fence around the pool at least five feet high with vertical slats no more than four inches apart to keep small children from squeezing through.
- + Cut out the horseplay. Pools are for swimming, not wrestling and tumbling.
- Indicate the break between the deep and shallow areas with a semi-permanent float line.
- Don't swim if you are overly tired, on medication, or intoxicated.
- Completely remove pool covers before swimming. Swimmers can be trapped underneath them.
- Dive only from the diving board. Never dive from the side where you might collide with the opposite wall or the pool bottom.
 - * Never swim alone or allow others to.
 - ◆ Learn CPR!



Photo by MSgt Perry J. Heimer

LCDR. STEVE JAEGER Courtesy Safetyline, Sep/Oct/Nov 97

beautiful Sunday morning in Hawaii was a great time for a 100-mile bicycle ride with my friend. We were taking part in the annual Honolulu Advertiser Century Ride, which also has 25-, 50-, and 75-mile options. I'd been an active cyclist for 7 years and had done the 100-mile ride two of the previous three years (a poorly scheduled deployment interfered once).

A group of people from my squadron were also riding in the event. My friend and I started out together. I had made it over two of the four major hills we would climb during the ride when I looked back for my friend. He was nowhere in

sight, so I rode at a comfortable pace while he caught up. Then a group of three cyclists passed me in a "pace line," which is where everyone rides in a tight formation, taking turns breaking the wind in front. After your turn in front, you drop to the back of the line. Everyone shares in the work at the front, and everyone rides faster. I joined the pace line, which included a husband and wife and another rider. We averaged about 25 mph over the slight, rolling hills on Oahu's beautiful Windward Coast.

We filled our water bottles at the next rest stop. I waited for my friend until my new group took off. Once again we were in a fast pace line, rolling by many cyclists on the road. We were 47 miles into the ride, making excellent time. The 50-mile turnaround was at a beach park where we could get more water. I had just finished my turn at the front and

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t was a beautiful autumn Sunday afternoon and my 16-year-old son, Jason, and I were having a great time riding our motocross dirt bikes in the woods near Jennings, Fla. We both belonged to the "Muddobbers" motorcycle club in Valdosta, Ga., and were riding on some new trails.

We'd spent a long day cutting tree limbs and clearing

gloves, blue jeans and motocross boots. I'd been riding dirt bikes since 1972 and had always worn the best protective gear I could buy - even before I became certified as a Motorcycle Safety Foundation (MSF) instructor. My son, who'd been riding dirt bikes since I ran him through the Foundation's Beginner's Riding Course in 1994, also never rode without wearing all of his protective gear.

This motorcycle protective riding gear prevented what could have been serious injuries.

brush and wanted to take a final lap on the new trail. We were both wearing our full-face helmets, goggles, plastic chest protectors, long sleeve racing jerseys, padded stirred up a large cloud of dust as Jason landed facedown in the dirt. The bike ended up on top of him with the engine still screaming at full throttle and the rear

Our bikes were set up with cut-down handlebars featuring plastic bush covers over the hand controls for riding in the woods. Both bikes were light in weight and had more than ample horsepower. We usually rode slower than 30 mph in the open areas and had been known to slow down to a crawl when weaving through the trees.

During the final ride of the day my son and I were following another club member as we came out of a tight section into a faster area that had a lot of dips. As we rapidly accelerated, I heard Jason's throttle stick wide-open. His bike flipped and wheel spinning near his head.

Jason managed to lift the bike and roll free as I slid to a stop beside him. I ran to his bike and used the emergency cut-off switch to kill the engine. I then

checked him over for injuries. At first they seemed minor, but upon further examination, they appeared to be more serious.

I quickly opened the small first aid kit I carry on my bike. Using my Red Cross First Aid and Air Force Buddy Care training, I tried to make him feel more comfortable. First I gave him some TylenolTM for any pain he might have, and then I bandaged his thumb. However, his skin, shoulder and back injuries were more than my first aid kit could handle. I decided that I needed to get him back to our truck, which was more than a half-mile away.

Jason could not walk very well, so another club member gave him a ride part of the way. Then some kind hunters gave him a ride in their vehicle back to our truck and trailer. I checked out the throttle operation on Jason's bike, then rode it back while one of our friends retrieved my bike. As I tended to Jason's injuries, our friends tied down our bikes. We then headed for the emergency room at the South Georgia Medical Center.

Looking back at the accident, Jason was very fortunate not to have had more serious injuries. His helmet not only absorbed the initial impact with the ground, it also protected his head from the spinning rear wheel and drive chain. Jason's helmet plainly shows the damage. There are scuff marks and deep scratches on the left side of the helmet and the visor was ripped off. His plastic chest protector was almost ripped off, but it kept the rear wheel away from his back. His shirt and gloves provid-



This helmet protected its wearer not just from an impact with the ground, but also from the motorcycle's rear wheel.

ed enough protection that he only lost one layer of skin, and his injuries should heal without any scars. All in all, Jason only missed one day of school and still wants to go



Protective riding gear like this glove can save a motorcyclist's skin during an accident.

out riding on his dirt bike.

The bottom line is that riding a motorcycle can be a lot of fun, but along with that are the risks that must be managed at all times. To do that you must wear the proper protective gear — especially a good helmet and get the professional training needed to give you the mental and physical skills to ride safely.



BOB VAN ELSBERG Managing Editor

he California Highway Patrol motorcycle officer looked over and grinned as he passed me in the left lane of I-5 headed north toward Los Angeles. We were riding in a real "frogstrangler" of a rainstorm and I thought, "You can afford to grin you've got a windscreen keeping the rain out of your face." Meanwhile, I could almost feel my new pair of jeans shrinking as I sat on my Harley Davidson Sprint. Still, I'd chosen to ride a motorcycle. It was up to me to learn to live with the elements.

He continued to slowly pull ahead in the left lane. I figured I was less likely to be run over by a distracted motorist if I rode next to him, so I twisted the throttle and tried to catch up. Funny thing was, I could hear the engine running faster, but I wasn't going any faster. "Hmmm...," I thought, "maybe the clutch is slipping. I'll just crank on the throttle again and see what happens." When I did, the rear wheel did a nasty little side-to-side dance that really got my attention. I knew instinctively what it was. My rear tire had broken traction and was spinning on the rain-soaked highway. When my heart started beating again, I decided it might be a good time to pull off and take a break.

Some road signs suggested I could get off at the next off-ramp and get some gas and coffee. Both sounded good, so I eased down the off-ramp and stopped at the intersection at the bottom. Looking to my right, I saw a gas station a short way down the street on the left-hand side of the road. No sweat! Traffic was light, so I figured I'd make a sweeping "S" turn and roll in like I owned the place.

My "arrival" was working pretty well until I encountered the smooth pavement at the entrance of the gas station. Suddenly a combination of gravity, G-forces and reduced traction all conspired against me. The bike went down onto its right side and, with me still hanging on, slid toward a gas pump island. This ruined my Marlon Brando-style arrival. Fortunately, I was wearing a helmet, boots, jeans and a jacket, so only my pride got hurt. Still, I'd been taken completely by surprise by the slickness of that rain-soaked concrete.

Twice in one trip I'd found out how dangerous rain-slicked roads could be when riding on two

wheels. During the following years, I encountered several other slippery road surfaces. Those experiences left me with two distinct impressions about riding on slick roads.

First, your bike may be fast and agile on dry pavement, but you haven't got the traction of a car when the rain starts falling. Maybe you've heard of something called "footprint"—which is the amount of tread your tires have in contact with the road. That's what gives you traction. A car's footprint hardly changes when going around a corner, but the same can't be said about a motorcycle. Because you have to lean, you're running more on the sides of your tires than on the center tread. You've got less footprint—or traction—just when gravity and Gforces are trying their best to dump you on the road. Add a little rain into the mix, and it doesn't take much imagination to see where the laws of physics will take you and your motorcycle.

Second, rain isn't the only thing that can give you the "willies" going down the road. Mother Nature has a few more tricks in her bag including sand, gravel, leaves, mud, snow and ice. And she isn't the only one who'll have you traveling down the road on your hide. Your fellow man has provided you with additional challenges in the form of slick lane markings, manhole covers, bridge gratings and rain-grooved concrete highways. All of these become even more "squirrelly" when it's raining.

Having experienced all of these, I'd like to share a few tips from the Motorcycle Safety Foundation in the hopes they'll help keep you from becoming "highway hash."
To ride safely on slippery surfaces:

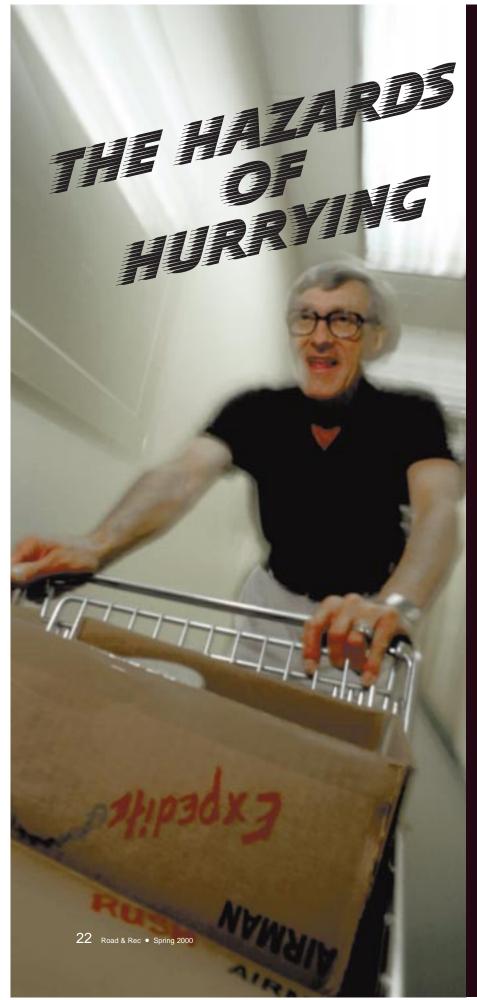
- ◆ Reduce your speed BEFORE you get to a slippery surface. Going slower will lessen your chances of skidding when stopping or turning. Remember, when the road is slick, your motorcycle needs more distance to stop. Also, it's particularly important to reduce your speed before entering wet curves.
- Be as smooth as possible when speeding up, shifting, turning or

braking. Remember, any sudden change in speed or direction can cause a skid. Also, don't be caught unawares by a slippery road surface. Check out the road far enough ahead so that you don't have to dodge a problem at the last second.

- ◆ When stopping use both brakes-not just the rear. Even on slippery surfaces the front brake is more effective than the rear. Remember to squeeze the brake levers gradually to avoid locking the wheels. **Some other tips:**
- ◆ The center of a lane can be especially hazardous when wet. Water and oil that has dripped from other vehicles - tends to accumulate there. making it particularly slick. When it starts raining, ride in the tire tracks left by the cars ahead. Normally, the left tire track will be the best position depending on traffic and other road conditions.
- Watch for oily spots on the road when you put your foot down to stop or park. You could slip and fall or your foot might slip off the brake pedal or shifter while riding.
- Dirt and gravel collect along the roadsides—especially on curves. To be safe, stay away from the edge of the road, particularly when you're riding at high speed or turning sharply.
- ◆ Rain dries faster and snow melts quicker on some sections of a road than others. Patches of ice tend to crop up in low or shaded areas and on bridges and overpasses. Try to plan your path of travel so that you can ride on the least slippery part of the road.
- ◆ Cautious riders avoid roads covered with snow or ice. However, if you must go over a slippery surface, ride straight ahead as slowly as possible and keep the motorcycle perfectly upright. If you come across a large slippery surface that you must cross very slowly, try letting your feet skim along the surface for added stability. Also, avoid using the brakes in such situations. \blacksquare

Editor's Note: For the latest information on USAF motorcycle mishaps, point your browser to the Air Force Safety Center website: http://www-afsc.saia.af.mil/AFSC/RDBMS/ Ground/motorcyclesum.html





familiar with the "big-name" causes of accidental deaths and injuries — things like drinking and driving, tornadoes, hurricanes, contact sports, power lines and drugs. But there's another killer out there one that is often not recognized even though it can be equally devastating. Like carbon monoxide, we're not aware of its dangers until it's too late. This lurking, unseen hazard is known as hurrying.

e're all

Why Is Hurrying Dangerous?

We often associate the dangers of hurrying with reckless driving and speeding. When we're late or flustered, we become more stressed and tense and tend to lose patience with those who are "in our way." To make matters worse, we're more likely to forget things and make bad decisions. Here are a couple of examples of where hurrying caused bad accidents:

- Witnesses to a horrible bus accident in Nashville, Tenn., stated that the bus driver ran two consecutive red lights before crashing off a bridge over I-40. Two teenagers died when the bus crushed their Volkswagen bug to a height of 18 inches. The driver was trying to make up for lost time on
- A witness to a deadly Amtrak train accident in Illinois confirmed an engineer's report that a truck driver tried to snake through the crossing gate to beat the train.

Hurrying becomes dangerous when it overcomes your sense of caution, clouds your judgment and leads you to make mistakes. These mistakes come in two disastrous flavors — doing something wrong, or not doing the right thing.

Doing Something Wrong

When we're in a hurry, we tend to make mistakes such as selecting the wrong switch, using an incorrect tool or spare part, driving too fast and ignoring warnings. If we're really rushed, we begin reacting impulsively rather than rationally. Here are two unfortunate examples of people who reacted without thinking:

- · Two young construction workers in Arizona were in a hurry one Christmas Eve. They hadn't quite finished their holiday shopping and were rushing to take down a 40-foot aluminum ladder. Both were instantly killed when they grabbed the ladder as it toppled onto a 7,200-volt power line.
- An experienced private pilot was in the habit of raising the flaps during landing to "glue the plane to ground." One day while landing a Beech Bonanza, he reached over and, with a single swift motion, depressed a safety then lifted the gear switch. The propeller struck the tarmac and the plane "glued itself to the runway" much sooner than expected.

Psychologists call these actions "errors of commission." Recent studies suggest 60 percent of hurrying mistakes are the result of people doing the wrong thing.

Not Doing the Right Thing

When we're hurrying, we tend to take shortcuts sometimes failing to do things that we should. Psychologists classify these types of mistakes as "errors of omission." Organizations as well as individuals can make this type of error as shown in the following example:

 In January 1986, NASA was pressured to launch the Challenger space shuttle without delay. The Challenger's mission was to launch a Haley's Comet probe just before the Russians launched their own. NASA also needed to launch the first teacher in space before the president's State of the Union address, which focused education. **NASA** management chose to launch the Challenger in record cold temperatures (28°F) despite the protests of engineers who voiced concerns about the integrity of the rocket booster O-rings. They pointed out that the lowest previous Shuttle launch temperature was 53°F and that the boosters had never been tested below 40°F. Just over one minute into the flight, an O-ring on the righthand booster failed and the Challenger exploded, killing all seven astronauts.

Why Do We Hurry?

Understanding why we hurry is important to reducing our tendency to hurry and will help us manage the risks when we are rushed. The following are four basic reasons why we hurry:

One: High Workload

Obviously, we hurry when we have more tasks, deadlines and responsibilities than we can handle. Unfortunately, the information age has increased the daily workload for nearly everyone. Gone are the days of two and three-week suspense times — now responses are expected soon after the boss's e-mail is read. What about downsizing and "doing more with less"? Consider how many people were employed at your job five years ago compared to today. Have the responsibilities and workload been lessened, or simply absorbed by the remaining workers? As workloads push us to the limit of our abilities, we're continually forced to operate in the hurry-up mode.

Two: Running Late

Thankfully, reliable transportation is now available for nearly everyone. Unfortunately, the downside of this modern convenience is that we're expected to be at more places and be at those places on time. We frequently check our watches for fear that we're running late for our next commitment. It takes only a small delay to put a kink in our schedule and have us rushing to beat the clock.

Three: Psychological Predisposition

Many of us have a natural disposition toward "Type A" behavior. People with Type A behavior struggle to achieve more in less time. They have trouble relaxing or getting work off their mind and often try to do two things at once — such as eating and working. Type A's have a strong sense of time urgency and are particularly susceptible to the hazards associated with hurrying.

Four: Professional Pressures

Many supervisors view employees who work fast to meet deadlines as being especially productive and motivated. This behavior is often reinforced with extra praise or early promotion.

Remedies for Hurrying

Libraries are filled with books on stress management, mainly because stress poses a danger to our continued health and well-being. By comparison, there are no well-known books or best sellers on the subject of hurry management. But there is hope. If you are prone to hurry or forced to hurry any activity, the following techniques will help you reduce the chances of making a mistake or causing an accident.

Slow Down

Obviously, the best method to control hurrying is to slow down. This requires two actions: (1) recognizing when we are hurried, and (2) consciously forcing ourselves to slow down. Simply realizing when our "HURRY" light is on is half the battle. Since rushing almost always causes stress, recognizing the symptoms of stress is essential to knowing when we are too hurried. Those symptoms include tightness in the chest, dizziness, shaking, irritable behavior and high blood pressure. By watching out for these, we'll know when it's time to slow down and exercise cau-

tion. And

we can slow down by taking a break, concentrating on one task at a time, or finishing one task before going on to another.

"Wind the Clock"

A tried-and-true pilot technique for handling overwhelming situations is to take a moment to "wind the clock." Instead of panicking when things become stressful, momentarily step away from the situation, calm down, and then re-attack the problem in a more rational manner.

B-Safe

Surrounding yourself with people who aren't prone to rushing — easygoing Type B people — will also help you slow down. Most of us try to fit in by imitating the people around us. Studies suggest when Type A people are exposed to Type B people, the Type A folks tend to slow down.

Time Management

As mentioned earlier, being late or delayed is a major reason why many people hurry. Managing our time wisely can help us set priorities, making sure we get the most important things done first so we're not rushed trying to do the remaining tasks. In addition, effective time management helps us to plan enough time to avoid running late or having to cut our travel times too close. It's a shame insurance companies don't offer reduced premiums for people who leave early enough to avoid having to rush while driving to work or appointments. We'd have fewer injuries and deaths due to careless and reckless drivers.

Just Say "No!"

One of my former bosses used to tell me, "No good deed goes unpunished." In other words, the better you are at your job, the more work you will get. If you find yourself in this category, you need to learn to diplomatically say "no" to additional responsibilities when you're already tapped out. Otherwise you'll be stuck trying to do more in less time by hurrying.

Haste Makes Waste

Today, more than ever before, we are expected to do more in less time and to be in more places on time. As a result, we're even more vulnerable to the hazards of hurrying. Chances are your last brush with death or injury happened because you (or someone else) was in an extreme hurry. Speed limit signs aren't just limited to our streets and highways — nearly every activity we do has its own invisible speed limits. The more we exceed these "speed limits," the more we endanger others and ourselves. By recognizing the perils of rushing and being aware of when we are hurrying too much, we can defeat this deadly menace. Otherwise, haste will continue to lay waste to our lives and the lives of others around us.

Complies with U.S.

SAFETY STANDARD

For Bicycle Helmets for Persons Ages 5 and Older.

Do You Have a \$10 Head?

...continued from page 17

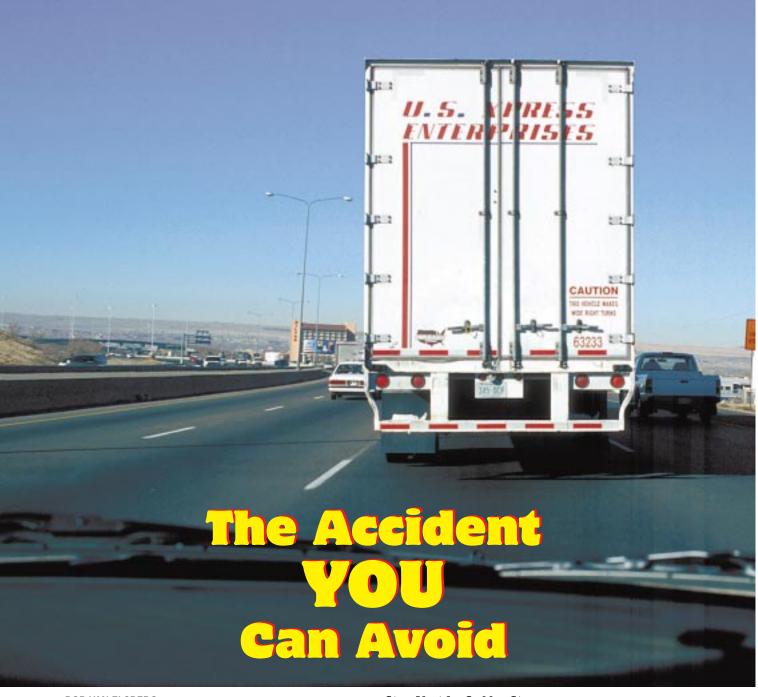
dropped to the back of the pace line, behind the wife, when she brushed her front wheel against her husband's rear wheel and started to weave. I immediately tried to move left to give her room, but before I could move more than a few feet away, she crashed. I was moving too fast to avoid hitting her in the legs, so I crashed too.

The husband helped move both of us and our bicycles to the side of the road. A policeman was quickly on the scene to direct traffic and call an ambulance. The wife had a few deep cuts on her legs where I'd hit her. I had landed on my head and shoulder and thought I'd broken my collarbone. The paramedics verified that I had, plus I had some seriously scraped skin.

They put me in the ambulance while the husband and wife waited for the stragglers' wagon to take them and all our bicycles to the finish area. After several hours in the emergency room, I was outfitted with a harness to immobilize my shoulder and a sling for my arm. The duty driver took me to meet my wife at the finish area where she was waiting after her own 50-mile ride. When I hopped out of the van, she was just heading off to the beach to catch some rays, wondering what was taking me so long.

Doctors said I'd be medically down for 6 to 8 weeks while my collarbone healed, but it could have been much worse. I'm convinced that if I hadn't been wearing a helmet I would have suffered a head injury that would have made my broken collarbone seem about as serious as a hangnail. I had no cuts or bruises on my head, in spite of the fact my helmet's plastic casing was split and the styrofoam inside was dented where I hit my head.

The helmet manufacturer has a lifetime replacement policy on their helmets. For \$15, the old helmet, and a description of the accident, they will replace the helmet (mine cost \$90). It reminds me of the advertisement I see in my cycling magazine almost every month - "Do you have a \$10 head? Then buy a \$10 helmet." My expensive helmet was worth every penny.



BOB VAN ELSBERG Managing Editor

ost people call them "rear-enders," but as one driver pointed out, it's a "front-ender" if you're the driver whose front end winds up getting smashed. Whether you're the driver in the front or the back, rear-end collisions are far too common. However, these are accidents that can usually be avoided if YOU, the driver in the rear, take a few precautions. Here are some tips to help keep you out of trouble and your car out of the auto body shop:

Stay Alert for Sudden Stops

Expect the driver in front of you to stop anywhere, at any time. After all, chances are he or she can see highway obstacles or even traffic problems blocked from your view. Here are some clues to watch out for:

- Driver ahead slows down.
- Directional signal blinks.
- Brake lights go on.

Stay Ahead of the Situation

Watch the traffic and keep an eye on the side roads. If possible, look way up ahead — something that will be easier to do if you're not tailgating. Often you'll spot traffic conditions or road obstacles which may force the driver ahead of you to stop suddenly. Here are some

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BOB VAN ELSBERG Managing Editor

Photos by MSgt Perry J. Heimer

Whamm --- "Yee-oww!!!"

I jerked my thumb back and dropped the hammer. I would have yelled again if I hadn't been so busy concentrating on blocking out the pain in my left thumb. I knew I wasn't much of a carpenter, but I didn't think I was that bad an aim with a hammer!

I pulled my glove off. Blood dribbled from under my thumbnail so fast I could have autographed the 2x4's I was trying to nail together. As I wrapped my thumb in a couple of band aids, one of the more experienced carpenters pointed out, "When you start the nail, hit it lightly. Once it's started, pull your hand out of the way then hit the nail hard."

The next day blood was still oozing out — only now my thumb was completely numb. Over a period of weeks I lost most of the thumbnail — which has only just now fully grown back. However, I could have saved myself MUCH pain (and the opportunity to write this story from experience) if I'd been paying closer attention and hadn't been in a hurry to keep up with the other carpenters. Sure, hand tools may look simple, but use them wrong and they can "bite" you. Here are a few tips based on the "do as I say, not as I do" axiom.

The Right Tool for the Job

Don't you feel stupid when you get hurt using a tool in a way that was never intended? You know what I mean — if that wrench was meant to be used a a hammer, it would have had a flat striking surface on one end and a handle on the other. It's the old, "If it looks like a duck and quacks like a duck, it probably is a duck" principle. That also goes for hand tools. "If it looks like a screwdriver and works like a screwdriver, it probably is a screwdriver — not a mallet."

Tool Rules

- 1. Buy the best tool you can afford. Cheap tools are more likely to break, leaving you stranded in the middle of a repair.
- 2. Keep all tools clean, free of rust, and in good working order.
- 3. Get rid of damaged tools don't try to repair them by welding or brazing.





This is NOT the way this claw hammer was designed to be



Using a screwdriver as a chisel is a BAD idea!

4. Don't be stingy. Chances are, if you need a half-inch wrench, you'll probably need two — especially if you're trying to loosen a half-inch nut from a half-inch bolt. Also, if you're planning on doing car repairs, buy both metric and standard-size tools. Just because you're driving one of

the "Big Three" doesn't mean your transmission or some other key component wasn't made in the "Land of the Rising Sun."

- 5. Inspect your tools for wear, cracks, chips and spreading especially on cheap open-end wrenches (see Rule 1).
- 6. Be sure handles are firmly attached.
- 7. Don't jury-rig an extension onto a handle to gain more
- 8. Wear safety goggles to keep metal or wooden splinters out of your eyes.
- 9. Keep your hands away from sharp edges and burrs.
- 10. When sawing, use slow deliberate strokes. Always keep the blade pointed away from your body.
- 11. Carry and store tools carefully.
- 12. Concentrate on what you're doing no matter how routine or trivial the task.

Hammers

- Swing the hammer so that the face is perpendicular (flat) to the surface being struck. Glancing, off-center blows can throw dangerous splinters into the air. Also, aim the hammer away from your body.
- Use only the striking surface never the side of the

head.

- When pulling nails or prying up wood, make sure you're not pulling these items directly toward your face.
- A hammer head should be at least 3/8" larger in diameter than the striking surface of the chisel, punch or wedge you're using.

Screwdrivers

- Ensure the blade tip fits snugly in the screw's slot. Using too narrow a blade could cause the screwdriver to slip and puncture your hand.
- Don't be a "chiseler." Trying to turn a screwdriver into a chisel by whacking it with a hammer is a good way to cause the handle to splinter or shatter.
- Avoid the temptation to use a screwdriver as a hammer.
- Don't use screwdrivers as pry bars, scrapers, lid removers or chisels.

Wrenches

- For better control, when possible pull the wrench toward you rather than pushing it away. If the wrench slips, you'll be less likely to end up with scraped knuckles.
- Box end or socket wrenches are much safer than adjustable (monkey) wrenches when trying to loosen a tight or frozen nut.
- Replace wrenches when the jaws become marred or
- Don't send a boy to do a man's job. Use a wrench not a pair of pliers — when the job requires a lot of force.
- Wrenches make lousy hammers.
- Steel tastes lousy, so don't put your head or face in line with a wrench when you're pulling on it. ■



See any potential for injury here?

Will will be a second of the s "Placing tape over viugs or wearing a glove on the hand with a viug does not provide protection or eliminate the reguliernent to remove linger rings." You see, even though it's worn under a glove, that ring can still get caught resulting in major damage to the finger. 30 Road & Rec • Spring 2000

ould you finish the statement "With this ring" with "I thee wed"? After looking at a summary of Air Force jewelry-relat-

ed ground mishaps - most of which turned out to be related to rings - I decided maybe the statement should be, "With This Ring I Mutilate My Finger." It was also quite a surprise to read the mishap summaries and find that a lot of women have had digits amputated after a ring mishap has mangled a finger. Sometimes the finger can be retained, but often it will never again work correctly.

On a happy note, ring mishaps seem to be going down. As I looked through mishap narratives from 1987 to the present, I found this common statement in the older reports, "supervisor did not advise workers about ring restrictions." On the other hand, statements about workers being counseled more than once about the dangers of rings were just as common. The newer narratives indicated the workers thought they were finished working, put their ring back on and continued to work. Unfortunately, they eventually caught the ring on something and literally destroyed their finger. Sometimes they simply "forgot" they had the ring on and apparently no one else noticed.

In some cases, the mishap summary said the worker wasn't wearing the required gloves. But Air Force Occupational Safety Hazard Standards (AFOSH) (particularly 91-66, General Industrial Operations) states: "placing tape over rings or wearing a glove on the hand with a ring does not provide protection or eliminate the requirement to remove finger rings." You see, even though it's worn under a glove, that ring can still get caught - resulting in major damage to the finger.

Duties that include climbing,

jumping off equipment such as stake bed trucks and forklifts are particularly hazardous when wearing a ring. For example, while preparing to jump off a stake bed truck, a worker placed her hand on the guard rail. As she jumped down, her ring caught on a protrusion. Her momentum and body weight caused the skin and flesh to be "degloved" by the ring. Another person was descending a ladder and slipped on a rung. As he tried to hang onto the ladder, his ring caught on the ladder and all the flesh was torn from his finger. In both cases, the fingers had to be amputated.

AFOSH standards provide examples of jobs where the wearing of rings is prohibited. However, no matter what job you're going to perform, take the time to do a quick risk assessment to see if there's a chance you could catch your ring on something. You may be surprised by the results. For instance, if you place your fingers inside a piece of office equipment, you could catch your ring on something. You might not damage your finger so badly that it has to be amputated, however, you might end up with a cut or a sore joint.

Complacency seems to be the cause of many ring mishaps. Often, people simply "forget" to remove their rings. Others get into bad habits, such as one victim who always ran his hand over the fender of his vehicle when walking around it. Unfortunately, one day he was in a hurry and his ring caught on a protrusion. The results? Fender -1, ring finger — 0!

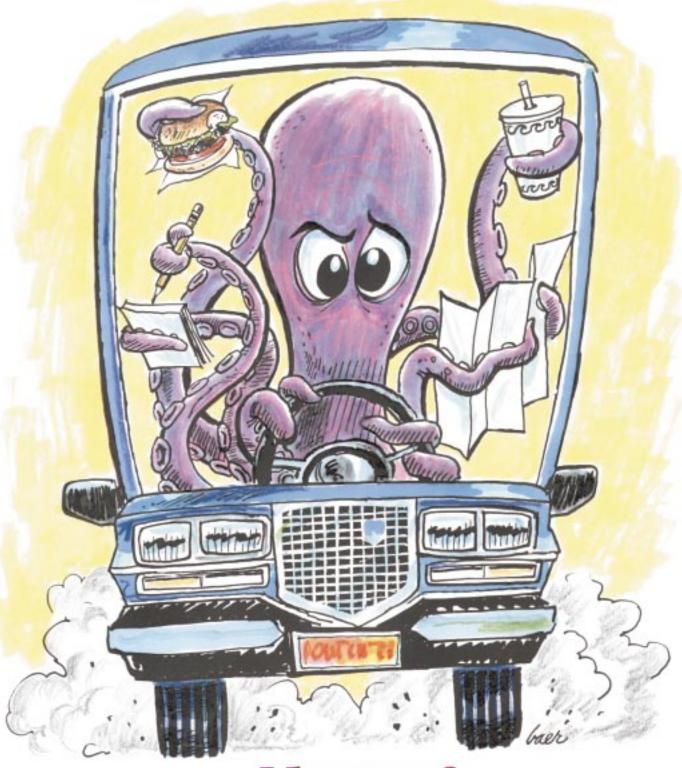
Sometimes people who would never think their ring might catch on something are hurt. One example is a person who slipped on a wet floor, put out her hand to catch herself, and caught her ring on the door jamb.

The job isn't the only place you can get into trouble. You should also do a risk assessment of the things you do around your home. One mishap summary described an individual who was trying to retrieve a model airplane from the roof of his quarters. He apparently thought he could reach it without a ladder, so he jumped up, grabbed the gutter, and tried to reach the airplane. When he realized he couldn't reach the airplane he let go, but his wedding band got caught on the gutter. He fell but the ring stayed where it was, tearing his finger completely off. Wonder if the model airplane is still on the roof?

Several years before I came to work at the Safety Center I was the secretary for a field maintenance squadron superintendent. One day a young sergeant and his new bride came to the office wanting to see the superintendent. Since he wasn't in the office, I offered to make an appointment and asked what they needed to discuss. The young woman immediately went into a tirade about a "stupid" rule the superintendent had just come out with requiring her husband to remove his wedding band when he came to work. She said she'd put the ring on his finger when they took their vows and he was never to remove it! I let her finish and then said: "I'll bet your husband would rather you take off your wedding band than take the chance of losing your finger!" He just nodded "Yes.' Then I said: "If your husband no longer has a ring finger, you won't have to worry about whether or not he wears his wedding band!" They looked at each other and walked out of the office. The husband's voice trailed after - "I guess we don't need that appointment!"

The rates are going down, but the equipment that has been a factor in ring-related mishaps is still out there. To keep the rates on a downward trend, please do those risk assessments and, if there's even a small danger, remove your rings. If vou work in the industrial areas identified in AFOSH Standard 91-66, other AFOSH standards, or technical orders, or if you work around open electrical circuits, always remove your rings before you come to work and don't put them back on until you're driving home. Those rings will look much nicer on fully intact fingers! ■

Keep Focused on Your Driving



...Always!