

Environmental Health & Safety Newsletter

July 1998

Bike Safety – Peter Haapaniemi – Family Safety & Health – Spring 1998

Jim Mead likes to mountain bike onto the hilly trails of California's Marin County. But before he goes, he checks his bike and puts on a helmet and gloves. "I know other riders who have had some pretty bad mishaps – some of them have wound up in the hospital," he says. "No road rash or cracked skull for me. It's worth it to use the right equipment".

As mead know, biking can be fun – but it's also serious business. Last year, more than 750 cyclists were killed in biking crashes, according to the National Safety Council – and bike riders made more than 580,000 emergency-room visits.

The best defense for a safe ride is to develop safe riding habits. But according to KidzFirst, a Minneapolis-based safety organization, less than 20 percent of children receive any type of formal bicycle-safety instruction. More than half the nation's bike injuries happen to children 14 and under.

But bikes aren't just kid stuff anymore. Today, more than two-thirds of bicycling-related deaths involve adults, compared with less than a third two decades ago, according to the Centers for Disease Control and Prevention.

Bicycle Safety Tips

Always use hand signals to let other riders and drivers know what you are doing.

Always wear a helmet. If you do crash, replace your helmet, because even if there is no visible damage, the shell or lining may be weakened.

Always stop for red lights at intersections. It's safe and it's the law.

Always ride on the right hand side of the road with traffic.

Never ride at night. It is seven times riskier than riding during the day.

Always wear retroreflective clothing and accessories to be more visible to traffic.

Put a Lid on It

In July 1992, New Jersey became the first state in the nation to pass a law requiring bicycle riders under the age of 14 to wear a helmet. Last summer, state officials announced that the fatalities for child bike riders had dropped 60 percent. For older riders unaffected by the law, fatalities stayed the same.

Head injury is the leading cause of death for bicyclists. "A bicycle helmet is the single most effective safety device available to reduce head injury and death from bicycle crashes," Richard Martinez, M.D., administrator of the National Highway Traffic Safety

Administration, recently noted. Here are some basic helmet rules to remember:

Your helmet should have a sticker from the American National Standards Institute (ANSI), the Snell Memorial Foundation(SNELL), or the American Society for Testing and Materials (ASTM), showing that it meets their safety standards.

Your helmet should be comfortable, sit level on your head, and be snug enough so that it doesn't rock back and forth more than an inch.

Always buckle your helmet straps.

Don't buy a helmet for your child to "grow into." Buy one that fits properly.

Air Bags – Jim Matejo – Traffic Safety, March/April 1998

Air-bag critics would have you believe there are a million reasons why the federal government was wise to allow consumers to have air-bag cutoff switches installed in their vehicles starting this year.

However, if you listened to medical experts rather than the critics, you'll find that rather than a million reasons, there really are only two for adults and four for children.

Dr. Tillman Jolly, associate professor of emergency medicine at the George Washington University Medical Center was asked by the National Highway Traffic Safety Administration to study all the reasons and excuses given to determine just which medical conditions make an on/off switch sensible for an adult.

Jolly and a panel representing 17 medical specialists came up with two: achondroplasia, a rare condition in which an adult has such short limbs he or she must sit too close to the steering wheel in the path of the bag; and severe scoliosis, in which an adult is bent over and hunchbacked and in the path of the bag.

"There are few medical situations which warrant the cutoff switch and in which the adult would benefit," he says. "Heart disease, lung disease, shortness, pregnancy and advanced age themselves do not put the person at risk and are conditions in which, if you take the bag away, you also take away the benefit."

And, Dr. Marilyn Bull, a member of the American Academy of Pediatrics committee on injury and poison prevention, says there are only four medical reasons for consumers to want a cutoff switch for their children: uncontrolled seizures, severe respiratory problems that breathing, tracheostomies (when a device is inserted in the windpipe to aid breathing) and severe gastroesophageal reflux, or throwing up. Neither Jolly nor Bull listed "I'm afraid" as a valid reason.

The nation's automakers say they were relieved that the government decided to allow consumers to install air-bag cutoff switches in their vehicles rather than allowing consumers to remove air bags entirely from their cars. Better switched off than gone.

But each automaker also insisted that the combination of safety belts and air bags still provides optimum safety.

By the way, most automakers say they'll charge a hefty fee, \$150 to \$300, to install an on/off switch, in part to discourage casual deactivation. And the regulation doesn't force dealerships to install the switch. Many say they won't because they fear the liability and potential lawsuits.

As expected, there are some loopholes in the new regulation. Motorists have to obtain a government form and apply for permission to have the switch installed. But in a few years, when cars with switches make their way onto used-car lots, consumers won't need to fill out a form or seek permission to buy a car with a switch, the government says. To make it a little more difficult to obtain a switch, you must apply for permission for each car you own.

And if you don't have anyone in your family with a medical condition that warrants an on/off switch in your car, but tell the government you will transport such a person in your car anyway, you can
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NHTSA spokesman Phil Frame says motorists will be on the honor system in applying for the switch. "No documentation (of medical history) or justification is needed." If you lie to get a switch, it can be a felony, but Frame couldn't say what the penalty would be and doubted it would be enforced anyway.

Usually the air-bag debate focuses on the number of people killed by air bags – 89 adults and kids, most of them either unbuckled, buckled improperly or in an infant car seat in the front rather than in the back where the seat and child belong. But Janet Dewey, executive director of the Air Bag Safety Campaign, brings up another number worth noting – 1.8 million air-bag deployments since the safety device first arrived on the scene. So that's 89 deaths out of 1.8 million deployments. That's rather compelling evidence in favor of air bags.

Take Warehouse Safety Seriously – Susan Meyers – Safe-Worker, 2/97

In warehouse operations, heavy lifting, material-handling demands and forklift operations can pose many risks for injury. According to a 1991 Bureau of Labor Statistics survey, warehouse operations reported double the number of lost workday injuries than non-warehouse operations. The most common injuries reported include sprains and strains, breaks, bruises, and fractures.

The good news is that an increasing number of companies are providing regular training and education to their warehouse employees to help reduce workplace injuries.

"Companies with written safety and health programs in place have lower injury rates," says Walter Jones, industrial hygienist, International Brotherhood of Teamsters, Washington, D.C.

"Training and education are absolutely critical to prevent injuries", says Mike Jenkins, president of the American Warehouse Association, Park Ridge, IL. "We're seeing an increase in safety programs because warehouse operators realize that people are their most important resource.

While forklifts and other material-handling equipment perform much of the heavy lifting these days, workers still do their share. When these tasks are performed improperly or too quickly, back injuries can occur. The following tips can help workers prevent back injuries:

- Warm up, stretch and do trunk-strengthening exercises before you attempt to lift heavy objects.
- When lifting heavy weight, bend your knees and lift with your legs, not your back. Bring the object close to the body. Always avoid twisting while lifting; use pivot motions instead.
- Ask another employee to help you lift heavy objects.
- Exercise and maintain good overall fitness to help prevent injury and recover more quickly from injury. Do back-strengthening exercises as well as aerobic exercises such as walking, swimming or bicycling.

While an increased use of forklifts and automated equipment in warehouses has helped reduce the incidence of back injuries, forklifts can cause serious injuries when used carelessly or by untrained workers, Jenkins says.

"We haven't seen a single forklift injury over the last six years as a result of an extensive safety and training program," says Vlado Senkovich, director of corporate safety, security and environmental affairs, McGraw Inc., Irvine, CA, whose warehouse facilities operate 24 hours, 364 days a year.

All workers receive safety training and specific instructions on general lifting, and forklift operators receive specialized training. Forklift operators must perform routine light maintenance on their forklifts and fill out a safety checklist with each shift change before operating the machine, Senkovich says. The company has also found that establishing a maximum speed of 5 mph for all trucks, as well as providing an environment that allows workers to perform their jobs unhurried has helped create safer working conditions. Forklift and loading accidents can be avoided by following some important safety measures.

- All drivers should be trained according to OSHA's standard (see 29 CFR Part 1910.178) and attend regular refresher courses.
- When provided, wear safety belts or seat-restraint systems when operating a forklift truck.
- Warehouse aisles should be free of debris and obstructions and wide enough to maneuver trucks safely.
- Maintain a clear line of vision at all times. And always be on the lookout for pedestrians.
- Never start to get off a forklift before it comes to a complete stop.
- Never attempt to transport unstable loads.
- Chock the rear wheels of all trucks at the dock during loading and unloading to prevent trailer creep and unexpected truck departure.
- Maintain good communication between truck driver, dock attendant and forklift operator to prevent accidents.

These additional tips can also help prevent accidents and injuries to warehouse workers:

- Keep the warehouse clean and free of debris and spills.
- Wear the recommended personal protective equipment such as hard hats, safety glasses, steel-toe shoes or protective gloves.
- Report any leakage from materials immediately so it can be properly assessed to determine if it's hazardous.
- Never place damaged pallets in a rack.
- Store the heaviest loads at the bottom of a rack and the lightest loads at the top.
- Make sure storage structures are not loaded beyond their design load capacity. (Manufacturers and suppliers should provide "Load and Safety" notices with each installation.)

A warehouse can be a dangerous place. "Workers should take every aspect of safety and training very seriously, because the information they miss may be the information that saves their life," Jenkins says.

Spring is Sprung, El Nino's Quit, Don't Let the Pests Give You A Fit – California Department of Pesticide Regulation

Winter's storms will bring swarms – mosquitoes, ants, termites, weeds and other pests – to many

areas of California, according to Cal/EPA's Department of Pesticide Regulation.

Warmer weather and excessive moisture are expected to produce a bumper crop of pests this year. Whether you live in the city or on the farm, DPR has advice on how to keep pests under control – and avoid harm to the environment.

Early in the season, before laying her eggs, a mosquito enjoys a blood meal, which explains that itchy welt on your arm. Then the pregnant pests look for a couple of inches of standing water. One female may produce up to 2,000 eggs that hatch into hungry blood suckers in less than two weeks.

Check outside your home or office for "mosquito incubators". Drain plugged gutters, spa covers, flower pots buckets, and water anywhere it collects.

An uncovered swimming pool left unattended for a month can produce enough mosquitoes to swarm a city block.

Permanent water basins such as ornamental pools and fountains require different strategies. Ponds may be stocked with mosquito fish (*Gambusia affinis*) sold by mosquito abatement districts. (Look in the county government pages of the phone book, or call the county agricultural commissioner's office.)

Another option is a microbial pesticide, *Bacillus thuringiensis israelensis*, or B.t.i., sold at plant nurseries. Some products are formulated in doughnut shapes that float and slowly release a natural chemical into water. Mosquito larvae feed on it and die. (It's also okay to use B.t.i. and mosquito fish together.)

Outdoor foggers may offer only temporary relief. Minimize your exposure by (1) avoiding the outdoors in early morning and twilight hours, when mosquitoes are most active, and (2) dressing for maximum protection. Screens and netting can also add a decorative touch to any abode.

As your last line of defense, select an insect repellent and follow the label directions carefully. Apply only to exposed skin and clothing, as directed. Never use repellents on broken or irritated skin (sunburn), around the eyes or mouth, or – in the case of children – on hands that may come in contact with mouths. Use repellents sparingly. Always start with a low concentration product and reapply only as needed.

Extremely wet conditions have already driven ants out of their burrows and into dwellings in some areas. Argentine ants – about the size of the "t" – have become the No. 1 household pest in Southern California. They actually thrive under cooler, moist conditions, reproduce in massive numbers, and can quickly show up for dinner on your kitchen counter.

Seal cracks and crevices with caulking to prevent easy entry. Store foods such as cereals, pasta, flour, and sweets in tightly sealed containers. Keep your kitchen clean of crumbs and cooking grease. Empty your garbage can daily, preferably in the evening to discourage midnight snackers that may include other pests, such as roaches and mice.

Use small plastic traps, placed beyond the reach of children and animals, with the bait that worker ants will carry back to their nest, killing the colony. Traps should not be used in conjunction with sprays that kill ants on contact.

For more tips on preventing pests and using pesticides safely, check out the "Consumer Fact Sheets" section of DPR's Web Page, www.cdpr.ca.gov.

Know When To Go – Getting Out Quickly can Save Your Life

restaurant or working on campus – when suddenly a fire alarm sounds. The first thing you do is look around to see what everyone else is doing. According to the National Fire Protection Association (NFPA), this hesitation is common, but could prove deadly.

"Too often people don't react when a fire alarm sounds. Particularly in public settings, people tend to wait to see how others respond," says Meri-K Appy, NFPA's vice president for public education. "We know from tragic fire incidents that a quick, decisive response is often what makes the difference between life and death."

EH&S supports efforts to improve the campus community's responsiveness. Ms. Debbi McFall, Emergency Services Coordinator in Public Safety, stresses the importance of escape planning in any location. "No matter where you are on campus or in the community, if a fire breaks out, it's too late to start developing a plan," she says. "You've got to take the fire alarm seriously and respond immediately in a variety of situations."

If you or anyone in your building has questions concerning fire prevention or escape plans, contact Ms. McFall at extension 6891.

New Exposure Limits for Methylene Chloride

Cal/OSHA is tightening its rules for worker protection against methylene chloride (CH_2Cl_2 , also known as dichloromethane or MC). The rules are being modified to provide greater protection against the chemical's health effects that can include cancer (particularly of the brain), cardiovascular disease, central nervous system damage, and skin and eye irritation. In addition to its use as a common laboratory solvent, MC is a component of some consumer products, including certain paint and furniture strippers.

The maximum concentration of MC vapor is considered safe to breathe for 8 hours a day (otherwise known as the Permissible Exposure Limit or PEL) is being reduced from 50 parts per million (ppm) to 25 ppm in all work areas. Other requirements for non-laboratory areas may include medical evaluations and regulated work areas, depending on the degree of MC use.

If you or people in your department regularly work with MC and may be exposed to its vapors (that is, outside of a fume hood), contact EH&S at extension 4697 to have the safety of the work evaluated. Of course, even when working with MC in a fume hood, proper eye and skin protection should be worn. Because MC readily soaks through most laboratory gloves, change gloves as soon as they are contaminated with MC.

Vector Management Clarification

In August of 1997, EH&S acquired the bulk of the vector management program from Facilities Management. There has been some confusion as to which department is responsible which functions. The following should clarify the issue:

- Environmental Health & Safety responds to all calls regarding indoor and outdoor live vermin such as squirrels, rats, mice, skunks, etc. EH&S also responds to outdoor insects such as wasps, bees, mosquitoes, ants, etc.
- Facilities Management responds to all dead vermin not killed in traps or by the University's vector management contractor. Facilities Management also responds to insects found indoors such as ants, roaches, etc. In the event of insects inside and outside the property, EH&S would exterminate the outside insects and Facilities Management would exterminate the inside insects.

If you have any questions, please call EH&S at 4697.

Hazard Communication Reminder

When you receive an order, please look at the invoice attached to the package to see if a Material Safety Data Sheet (MSDS) was sent with it. If so, please make a copy for yourself and forward the original to Environmental Health & Safety. We will enter the data into our MSDS databank, assign a code to that MSDS and notify you of the code for reference.

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