
SAFETY FORUM

**Newsletter of The School and Community Safety Society of America
American Alliance for Health, Physical Education,
Recreation, and Dance**

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DRIVING SAFELY THROUGH THE AGES: ADDRESSING THE SPECIAL CONCERNS ABOUT MATURE DRIVERS

In contrast to popular belief, mature drivers (those 55 and over) have some of the lowest accident involvement rates of any driving age group, according to the National Safety Council.

Nevertheless, the number of mature drivers involved in fatal and non-fatal accidents was high: 2,880,000 drivers 55 and over were involved in motor vehicle accidents and 10,200 of these drivers were involved in fatal accidents.

These statistics illustrate the importance of addressing mature drivers' special concerns such as reaction time and vision. Seldom guilty of speeding or reckless driving, mature drivers often fail to yield the right-of-way or do not react appropriately at intersections or while changing lanes.

There are steps that mature drivers can take to compensate for the normal aging process.

Vision

- Having regular eye examinations can help you be a safer driver.
- Be aware that older drivers need more light to see well but also are more sensitive to glare. The aging process can also decrease peripheral vision which may affect driving performance.
- Remember that vision is hampered the most at dawn and dusk; avoid driving at those times.
- Do not smoke while driving, since it can affect night vision, fog the windshield and divert attention from the roadway.
- Having clean headlights, tail-lights, windows and turn signals is essential for visibility.
- It is also important to check rear view and outside mirrors frequently and pay special attention to blind spots.

Reaction Time

Quick response time often decreases with age, causing slower reactions to traffic conditions. To compensate for this decrease, keep the following guidelines in mind:

- Conserve your strength when driving by pacing yourself. Also, plan shorter trips and take frequent breaks.
- Be familiar with any medication you take and its effect on reaction time. Even over the counter medications can hamper reflexes and diminish alertness.
- A complete medical examination is important for identifying diseases or conditions that might cause reduced attention or slower reaction time.

On The Road

Several techniques can help motorists maintain effective driving performance:

- Always wear your safety belt.
- Drive defensively.
- Stay on familiar roadways and plan the safest route based on the following:
- Clearly marked signals, signs and lanes
- Adequately lit streets and highways
- Lighter traffic during non-rush hours
- Intersections with right turns not left turns

If these options are not available, consider alternate ways of reaching your destination such as public transportation, taxis and car pools.

The National Safety Council believes that Defensive Driving is driving to save lives, money and time in spite of conditions around you and the actions of others.

FIRST AID PROGRAMS NOT "OSHA APPROVED"

Although OSHA standards call for first aid training, the agency does not "approve" or "certify" any specific training programs for instructors or trainees.

Assistant Secretary of Labor Joseph A. Dear, OSHA's administrator, added, however, that OSHA has had for several years guidelines on what OSHA considers essential first aid training.

"Prompt, properly administered first aid can mean the difference between life and death, rapid versus prolonged recovery, temporary versus permanent disability," Dear said.

Dear said OSHA has learned recently that a number of organizations are advertising their first aid training programs as "OSHA Approved" or "OSHA Recommended".

"While these may, in fact, be excellent programs, and while OSHA recognizes the importance of proper first aid training, the agency does not sanction any particular programs, and we want employers to know that."

OSHA regulations require employers to transport all injured workers to a nearby health care facility or have some on-site "adequately trained to give first aid."

Since workers conditions and potential hazards vary, the standard provides flexibility so that first aid training is appropriate for the individual work site.

SAFETY BRIEFS - "SIGNS TO BRAKE BY"

When it comes to braking in time, you can't always rely on the brake lights of the vehicle in front of you. The driver may brake too late or the brake lights may be burned out.

Instead, watch the vehicles in front of that one. "With the high-mounted brake lamps used today (in the back window), it's easy to keep an eye on several cars ahead of you," says David Willis, executive Director of the AAA Foundation for Traffic Safety in Washington, D.C. If you can see their brake lights coming on in the distance, you know the vehicle in front of you is next, and you've got a little extra time.

If the driver in front of you doesn't seem to use turn signals, pay attention to his or her driving pattern. Usually, the vehicle will drift to one side as it gets ready to turn. "Or you can watch the driver's head," Willis says. "If the driver looks

confused or lost and is looking from side to side, you can anticipate that he might be ready to do something unexpected.”

The best way to avoid a collision is to leave enough room between you and the vehicles around you. Use the four-second rule. Watch the vehicle in front of you pass a roadside marker and count, “one thousand one, one thousand two, one thousand three, one thousand four.” If you passed the marker before you finished counting, you’re too close!

CONSTRUCTION

OSHA has announced a new initiative that will begin this month. Joseph Dear, OSHA Administrator announced that OSHA will target four accident causes during inspections. The four causes are: fall hazards, crushing injuries (including trench collapse), electrical hazards, and struck by objects.

Compliance Officers will look for these four hazards at the start of the inspection. If they find that none of the four hazards exist on the site, they should terminate the inspection and move to the next site. If the Compliance Officers find one of the hazards, they will do a more comprehensive survey.

The directive for the new initiative has not been released yet.

MINING - “SMOKING”

Underground Coal Mines in 5 states were recently issued a total of 52 citations for failure to take proper precautions against smoking in the mines.

The citations range from the presence of smoking materials in the mine to inadequate programs assuring that smoking materials do not enter the mine.

No penalties have been levied at this point. MSHA promises to have similar “sweeps” in the future.

INDOOR AIR QUALITY

Several agencies of the government are considering rules that would affect the quality of air in buildings. OSHA is considering a standard on indoor air quality that includes a ban on smoking, or the provision of a smoking room with separate ventilation. The proposed legislation covers all indoor work areas, including office buildings.

Employers would be required to develop a written program that would include the building systems plan, a maintenance and inspection plan, and a training plan.

FACTS ABOUT WORKPLACE VIOLENCE

- Homicide is the fastest growing cause of occupational death.
- Homicide is the leading cause of death to women in the workplace.
- Among women, 42% of occupational deaths are homicides.
- A recent study estimated that more than two million Americans were physically attacked in the workplace in 1992.

The Bureau of Labor Statistics reports that homicide is the second leading cause of on-the-job deaths. The leading cause is highway accidents, according to the National Safety Council.

FROM THE U.S. DEPARTMENT OF LABOR
U.S. Department of Labor OSHA - Region III

25 Most Frequently Cited OSHA Standards in Manufacturing

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|---------------|--|
| 1. 1910.147 C | Lockout/tagout of hazardous energy |
| 2. 1910.1200E | Written hazard communication program |
| 3. 1910.212A | Machine guarding |
| 4. 1910.1200H | Training on hazardous chemicals |
| 5. 1910.1200F | Labels on hazardous chemicals |
| 6. 1904.2A | Employee injury/illness log |
| 7. 1910.1200G | Material Safety data sheets |
| 8. 1910.219E | Guarding belts, ropes and chain drives |
| 9. 1910.20G | Access to employee medical records |
| 10. 1910.215B | Guarding abrasive wheel machinery |
| 11. 1910.305G | Flexible cords and cables |
| 12. 1910.134B | Respiratory protection |
| 13. 1910.305B | Electrical cabinets, boxes & fittings |
| 14. 1910.106E | Flammable & combustible liquids |
| 15. 1910.304F | Grounding |
| 16. 1910.219D | Guarding pulleys |
| 17. 1910.215A | Abrasive wheel machinery |
| 18. 1903.2A | OSHA poster |
| 19. 1910.303G | Electrical general requirements |
| 20. 1910.151C | Quick drenching facilities |
| 21. 1910.23C | Open-sided floors |
| 22. 1910.219F | Guarding gears, sprockets and chains |
| 23. 1910.132A | Personal protective equipment |
| 24. 1910.22A | Housekeeping |
| 25. 1910.213H | Guarding radial saws |

These 25 standards accounted for two-thirds of all violations cited by OSHA inspectors in the manufacturing industry. The data covers a three-year period from January, 1990 through December, 1992 and is the result of all federal OSHA inspections conducted nationwide in all of the industries in manufacturing. February, 1993.

25 Most Frequently Cited OSHA Standards in Construction

1.	1926.59E	Written hazard communication program
2.	1926.59H	Training on hazardous chemicals
3.	1926.59G	Material Safety data sheets
4.	1926.404B	Ground-fault circuit protection
5.	1926.451A	Scaffolds - General requirements
6.	1926.20B	Job safety and health program
7.	1903.2A	OSHA poster
8.	1926.21B	Safety training for employees
9.	1926.404F	Grounding of electrical systems
10.	1926.500D	Open-sided floors
11.	1926.451D	Tubular welded frame scaffolds
12.	1926.405A	Temporary electrical wiring methods
13.	1910.20G	Access to employee medical records
14.	1926.100A	Hardhats
15.	1926.652A	Excavation and trenching
16.	1926.451E	Mobile scaffolds
17.	1904.2A	Employer injury/illness log
18.	1926.59F	Labels on hazardous chemicals
19.	1926.500B	Floors and wall openings
20.	1926.28A	Personal protective equipment
21.	1926.1053B	Ladders
22.	1926.152A	Storage of flammable liquids
23.	1926.1052C	Stairways
24.	1926.25A	Housekeeping
25.	1926.405G	Flexible cords and cables

These 25 standards accounted for approximately three-fourths of all violations cited by OSHA inspectors in the construction industry. The data covers a three year period from January, 1990 through December, 1992 and is the result of all federal OSHA inspections conducted nationwide in all of the industries in construction. February, 1993

ACCIDENTAL DEATHS UP 2% IN FIRST 7 MONTHS OF 1993

For the first 7 months of 1993, the number of accidental deaths was 2% higher than the first 7 months of 1992. Work deaths dropped 3%, motor vehicle deaths decreased 2%. Public fatalities in 1993 through July increased 5% and home fatalities increased 9% from 1992.

Disabling injuries for 1993 through July are estimated to number nearly 10.2 million. These are injuries that result in disability beyond the day of the accident. They do not include minor injuries which probably totaled twice as many.

The estimated cost to the nation for all accidental deaths and disabling injuries through July is \$217.6 billion. The costs include wage and productivity losses, medical expenses, administrative expenses, employer costs and motor vehicle property damage.

Month	TOTAL			MOTOR VEHICLE			WORK			HOME			PUBLIC		
	1992	1993	Change	1992	1993	Change	1992	1993	Change	1992	1993	Change	1992	1993	Change
January	6,850	6,450	-6%	2,980	2,850	-4%	1,000	1,000	0%	1,900	1,850	-3%	1,250	1,100	-12%
February	6,000	5,750	-4%	2,740	2,590	-5%	700	550	-21%	1,550	1,600	+3%	1,300	1,200	-8%
March	6,500	6,850	+5%	2,840	2,930	+3%	700	750	+7%	1,750	2,100	+20%	1,500	1,400	-7%
April	6,050	6,150	+2%	3,010	3,010	0%	600	600	0%	1,450	1,500	+3%	1,250	1,300	+4%
May	6,850	7,250	+6%	3,500	3,480	-1%	650	700	+8%	1,550	1,700	+10%	1,400	1,650	+18%
June	7,150	7,300	+2%	3,560	3,440	-3%	750	700	-7%	1,550	1,700	+10%	1,600	1,700	+6%
July	7,500	8,150	+9%	3,760	3,640	-3%	750	700	-7%	1,550	1,850	+19%	1,750	2,200	+26%
7 Months	46,900	47,900	+2%	22,390	21,940	-2%	5,150	5,000	-3%	11,300	12,300	+9%	10,050	10,550	+5%
August	7,850			3,800			700			1,650			2,050		
September	6,600			3,390			650			1,350			1,500		
October	7,600			3,940			750			1,600			1,600		
November	7,000			3,350			650			1,900			1,300		
December	7,050			3,430			600			1,700			1,500		
TOTAL**	83,000			40,300			8,500			19,500			18,000		
RATES***	32.5	32.8	+1%	15.8	15.5	-2%	3.3	3.2	+8%	7.6	8.2	+8%	7.1	7.3	+3%

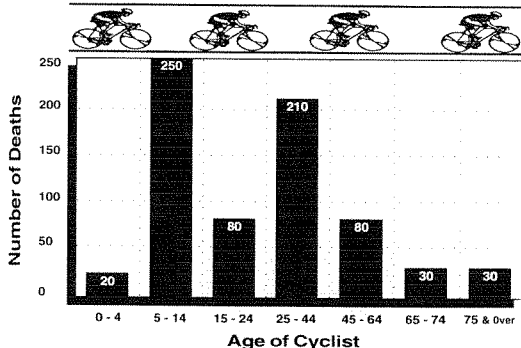
** The total for all classes does not equal the sum of the four separate classes because motor vehicle includes some deaths also included in work and home
 *** The death rates for the TOTAL and the four classes of deaths above are estimated annual numbers of deaths per 100,000 population, assuming the same percentage change in deaths for the entire year as occurred in the months reported.

BIKE SAFELY THIS SUMMER!

Many cyclists love to dart in and out of traffic. But, each year, about 700 bicyclists are killed on the nation's roads. The National Safety Council has these guidelines to help you cycle smart:

Obey traffic laws. Watch for opening car doors, sewer gratings, soft shoulders, broken glass and other debris. Make safe turns, using the correct hand signals and cross intersections with care. Never hitch on cars — a sudden stop or turn could send you flying into the path of another vehicle. Make sure your bike has the right safety equipment and always wear your helmet.

Bike safely this summer and have the best, not the last, ride of your life!



A Playground Primer For Teachers

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A first grader falls off a sliding board in a school playground and is injured. Not an unusual event; 120,000 children, under the age of ten, visit the hospital each year following a visit to the playground. A teacher's aid was supervising the playground; an excellent idea and not unusual.

What was unusual was the ensuing lawsuit against the supervising teacher and school district. This once unusual action of suing is becoming the norm.

The school district was successful in defending itself in the above case, but the judge made it clear in his closing remarks that "schools have a duty to kids when they are on a playground."

Today's classroom teacher, who has supervisory responsibilities in areas of physical activity, must be aware of this growing onslaught of lawsuits. Litigation in our society is everywhere. It may be our new national sport!

This piece is not about why there is a legal explosion, nor about the broader issue of law reform. Rather, it is a practical "Do and Don't" list for classroom teachers who take children out "for recess:"

1. Recognize there is a litigation problem and physical injuries are right up there as a reason to sue.
2. Ask for help from your principal. Ask for a playground safety check list. Have specially trained people, such as the physical educator, give workshops to classroom teachers. This is being reasonable and prudent. This is a teacher's best legal defense-and it sure helps keep kids safe.

Ask the maintenance department to check the equipment - on a weekly basis! Yes, safe equipment can become unsafe equipment very quickly because of a missing bolt or "S" hook. You should also do your own personal check prior to your playground duty.

Be at your post before the children. I know, this seldom happens in "the real world." Students somehow always beat the teacher to the playground! Assign a teacher who has a non-teaching period prior to playground time. Get that administrator or physical educator out there!

3. If you feel insecure around swinging, sliding and whirling bodies, perhaps the school can assign another teacher who feels more confident on the playground. You could take their bus, cafeteria or whatever duty.
4. Show children how to use the playground and its equipment. I know, no one ever had to give you instructions on how to use a slide! Instruction for the use of playground equipment is often neglected. Plaintiff lawyers will not neglect asking if the injured child received any instruction.
5. The lack of supervision - not being with the kids - is the major reason children get hurt, and people sue those who should have been supervising.

Place yourself so you can see everything. Concentrate on areas that present a higher risk. Climbing a ladder has a higher potential of injury than the sandbox. In short, use some common sense.

If the playground is open before/after school, have someone present. You can't lock your playground? Talk to your principal.

Supervision means control. Rules should be established, read to the children, reviewed and posted. Users of the playground should be warned about what could happen, if instructions are not followed.

6. Today's playground equipment is excellent. We know more about what makes playgrounds safer. We know, for example, that falls cause the most injuries, so equipment should be limited in height. We know to place only shock absorbing surfaces under and around the equipment. We know to avoid equipment that permit fingers, legs and heads to be entrapped. Deal only with reputable dealers.
7. Every time you enter a playground, ask yourself:
 - a. If there is a hazard, such as a broken swing, can I remove the hazard?
 - b. If I can't remove the hazard, can I place it off limits? Can I keep kids away from it?
 - c. If I can't do the first two, can I move the children to a safer area? If I cannot - don't have the activity.
8. Use only equipment purchased from reputable dealers. Use it in the manner for which it was designed. When in doubt about something, place it off limits or replace the item. Trying to use a broken item to save a few hundred dollars is not worth a potential quarter-million dollar law suit.
9. Some other basic points related to equipment:
 - a. Older and younger children should have separate areas of play and equipment geared for their size.
 - b. Have a safety zone around each piece of equipment. Place equipment around the perimeter of the playground. People should not have to travel through one area of activity to reach another activity area.
 - c. Check for sharp edges, bolts and corners. Cover them. Check the bases of all equipment for stability.
 - d. Check curb heights. They should be very low. It's better to lose some shock absorbing surface material than have kids tripping over curbs. You can replace the material.
 - e. Do not permit ball-playing in and around equipment - even when the equipment is not in use!
 - f. All equipment should be visible to the supervisor.
10. Meet your responsibilities - all the time.

Two well trained and experienced teachers decided to supervise from a bench at one end of a large playground. A student at the other end threw a stone at a classmate and missed. The stone hit the eye of a passing student.

Both teachers knew better, but they took a chance. They knew the odds were in their favor. Nothing happened the day before when they sat down and kept each other company. Safety is an ongoing job.

Kids need physical activity, they must play, they must move, they must be challenged. A level of risk will always be present. That is life. The key is to minimize the potential of injury by following basic safety guidelines. They will help keep kids - and teachers safe on the playground.

Readings

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Preventing Accidents and Injuries Through Better Product Design of Bicycle Helmets

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Plan for potential accidents. Even with due care, there is always the possibility that an incident might occur. First, we need to consider the factors that shape the personality of our children — his/her experiences, abilities, interests, attitudes, and other traits.

In any event, children cannot be expected to prevent injury on their own. According to the 1993 Edition of *Accident Facts* (National Safety Council) accidents are the leading cause of death for children and youths aged 1 to 18 years old. However, while accidental deaths decreased fairly steadily for those aged 1 to 12, they increased markedly for teenagers—from under 500 for those 13 to over 2,000 for those age 19. Although accidents account for less than three percent of deaths for those under age one, the number of accidental deaths for this age group is greater than that for any other age less than 16.

Data compiled by the U.S. Consumer Product Safety Commission (CPSC) in 1991, estimated 492,000 bicycle-related injuries treated in hospital emergency rooms involved children and youths 0-29 years of age. Approximately, 87 percent of these head injuries were victims between 0-14 years of age.

Injury is probably the most under-recognized major public health problem facing the nation today. By studying and compiling data on child injuries the opportunities for reducing morbidity and mortality will be reduced by charting and intervening to prevent injuries.

Data collection and analysis can assist in an injury control program only if it is carried out well. Inaccurate data or data analysis can result in targeting the wrong injury or the wrong population or when implementing the wrong intervention. It is a good idea to make as much use as possible of existing data prior to collecting additional data. An efficiently targeted data collection system will be more cost-effective than one that collects data that are unnecessary or available from another source.

One of the primary reasons for collecting data on injuries is to define the problem by identifying the characteristic ways in which injuries occur, the types of people to whom they occur, and the typical consequences of these injuries.

The most serious bicyclist injuries result from bicycle-motor vehicle collisions and this article will concentrate on the injury prevention and hazard control knowledge in the specific area of bicycle helmets. This will have a great influence on how to approach and understand the causes of injury and dangers for elementary school children and our young adults.

In its annual publication concerning bicycle use in the U.S., the Bicycle Institute of America stated that for the tenth year in succession, a steady increase occurred in all categories of bicycling.

In 1992, the BIA estimated that 99 million people rode bicycles — 44 million were children under the age of 16.

In the demographics of bicycle-related injuries over the past several years there are approximately 1000 bicycling fatalities each year with three fourths caused by head injuries. Half of those killed are school-age children. There are two federal government agencies that collect bicycle data on crashes and injuries — the Consumer Product Safety Commission (CPSC) and the National Highway Traffic Safety Administration (NHTSA). The National Electronic Injury Surveillance System (NEISS) was created by the CPSC to track product-related injuries treated in hospital emergency rooms. In 1991 of the 601,200 bicyclists injured, nearly 70 percent of the injured bicyclist were male. Two-thirds (400,000) of the injured were under 14 years of age. Bicycle fatalities of all ages represent two percent of all traffic deaths. Head injury is the leading cause of death in bicycle crashes.

As indicated earlier, of the more than 1000 bicycling deaths each year, three fourths are caused by head injuries. The primary question to ask ourselves is “What must we do to prevent the bicycle-associated head injuries?” A number of studies concluded that using a bike helmet can reduce the risk of head injury by 85 percent, the reason being that in an accident, a bicycle helmet absorbs the shock and protects the head from such consequences by absorbing the energy of impact through the crushing of their plastic and polystyrene shell. Falls of as little as one foot in distance onto a hard surface have the potential to generate enough force to result in fatal head injuries.

In a study by Sacks, Hulmgreen, Smith and Sosin from 1984 through 1988 the following data was compiled.

- Bicycling accounted for 2,985 head injury deaths (62% of all bicycling deaths);
- Forty-one percent of head injury deaths and 76% of head injuries occurred among children under 15 years old;
- Universal use of helmets by all bicyclists could have prevented as many as 2500 deaths and 757,000 head injuries. This translates to the fact that;
- It was estimated, during this study, that less than 10 percent of the nations 85 million bike riders use helmets. Among children under 15 the figure is approximately 3 percent.
- Helmets could have prevented one death every day and one head injury ever four minutes during the five year study period.

However, the A.C.P.S.C. Study in 1993 stated that more children under age 15 are now using helmets (approximately 15%). This is three times higher than the 5% usage rates found in some earlier studies. Further, 85% are not using helmets and this is the target group we should be interested in working with in helmet usage.

The CDC and prevention researchers concluded that:

- Small children (age 2-6) are the most likely age group to suffer head injuries in bicycle accidents
- Over 130,000 injuries and 350 deaths per year could be prevented by helmet use
- Among children, the death rate from bicycling accidents exceeds the rate from more publicized causes, such as accidental poisoning, falls, and firearm injuries.

However, bicycling in recent years has become the fastest growing sport in the U.S. Bicycle helmet sales have increased from a few thousand in 1975 to 5.5 million units in 1991, with an estimate of 8.5 million helmets in 1994. The most important statistic is the increase by children (15% - CPSC).

The Sacks study calculated that over 300,000 head injuries could be prevented if 50% of cyclists wore the bicycle helmets made with a foam plastic core and a hard plastic shell or synthetic fabric cover.

In many communities and states safety professionals and researchers are focusing on their efforts on preventing bicycle-related head injuries among children (rather than among adults) by increasing children's bicycle helmet use rates.

According to Dr. William King, a trauma epidemiologist, "the best thing parents can do is set an example." He advocates that adult bicycle riders wear helmets, put them on infants in carrier seats (not recommended for children under 6 months), and get children in the habit of putting on the protective headgear from the time they toddle to the time they climb onto their first tricycle. Routinely associating wearing a helmet with riding a bike is the best defense, against later peer pressure from those who may ridicule someone for wearing such protection.

Bicycle helmets have been used in many activities because of their light weight and protective abilities and, as a result, other standards based on the bicycle helmet standard have been developed.

ORGANIZING A BICYCLE COALITION

Based on the fact that bicycles are associated with more childhood injuries than any other consumer product except for the automobile, educators, pediatricians, public health care providers, legislators and the enforcement professionals need to plan and offer good examples in preventing bicycle head injuries.

There are standards for bicycle helmets set by the Snell Memorial Foundation and the American National Standards Institute (ANSI). Helmets are tested by determining deceleration inside a helmeted head form dropped onto a steel anvil.

Recommendations to parents by emergency medicine physicians and pediatricians include the following information:

- make sure bicycle helmet fits the child's head snugly;
- make sure it is comfortable;
- adjust straps so the helmet covers top of the forehead;
- fasten the buckle and adjust straps;
- helmet should not be able to be pulled off the head or to be rocked from side to side;
- purchase only a helmet that meets either the American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), or the Snell Memorial Foundation standards;
- replace any helmet that has been involved in a crash.

As of January 1994, approximately 14 states have enacted mandatory laws of wearing bicycle helmets of some type aimed at age groups up to 18 years old.

CONCLUSION

Injury prevention is a major public health priority at the national level. The injury epidemic is probably the most under-recognized public health problem in the U.S. today. In evaluating our data and developing intervention programs, we find that most of the resulting deaths, disabilities and disfigurements need not have happened at all. Effective injury prevention programs could result in many injuries being entirely prevented or, certainly, in their severity being diminished. I encourage all in attendance today to assist in the reduction of these injuries.

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