A.B.A.T.E. of IOWA

Making sure motorcyclist are seen and heard

SHARE THE ROAD PROGRAM

2008 Presenter's Guide

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Introduction to ABATE of Iowa's Share The Road Program

Congratulations on your choice to participate in this exciting and rewarding program. The following is the basic information you should need to get started. You must participate in classes with an experienced presenter before attempting to present on your own. By being mentored in to the program we can assure all our presenters are covering accurate and consistent curriculum in each of our presentations.

The following outline contains suggested topics to cover. Depending on allowed class time you may need to shorten up the program. The basic curriculum for a youth program that must be covered is as follows:

1. Qualify your self as a motorcyclist and a speaker
2. Stereotyping of motorcyclist
3. Statistical information that shows the need for more aware drivers
4. Drinking and Driving do NOT mix
5. The responsibility of driving and sharing the road (sunny day demonstration)
6. Look twice once for cars a second for motorcycles
7. Always try to judge the speed of a motorcycle for at least 2 seconds
8. Look twice before changing lanes
9. A bike uses the entire lane and why
10. The lethal left turn blind spot
11. Large groups of motorcycles
12. Passengers and operators dress for your own protection
13. Take a rider education course if you want to become a motorcycle operator

Share the Road has grown extensively over the last few years due to our success in the classroom exceeding the curriculum in the driver's education manuals for sharing the road with motorcycles. Word of mouth from one educator to another has been our best asset. Just as good class experiences built us up, any bad classroom experiences can tear us down. It is your responsibility as a presenter to represent the program in a positive light.

A few tips to a successful presentation are:

1. Know your material, before the presentation rehearse, rehearse, rehearse.
2. Dress for success, avoid offensive clothing and or vest patches.
3. Speak clearly and to your audience
4. Take charge of the presentation, you must control the direction of the presentation.
5. Be accurate with your information, have a backup with you if you use it.
6. Get your audience involved, don't put them to sleep
7. Remember you are there make more aware drivers

INTRODUCTION:

1. **Who You Are**
2. **Stereotypes**
3. **Whom You Represent ABATE**
4. **Your Riding Experience**
5. **Why You Are Here Today S H A R E**

QUESTION THE AUDIENCE:

1. **How many have ridden on a motorcycle?**
2. **How many have driven a motorcycle?**
3. **Driven a moped or ATV?**
4. **Why would someone want to ride a Motorcycle**

STATISTICS:

1. **Last decade overview 1990 through 1996**
2. **NHSTA and Iowa DOT numbers show the increase in motorcycling**
3. **Harry Hurt Report**

SUNNY DAY DEMONSTRATION:

1. **Ask if they know anyone that has been killed on a motorcycle.**
2. **Reinforce the responsibility they are about to take on as drivers**

BIKE VS. CAR DIFFERENCES:

1. **Motorcycles are smaller, I didn't see the motorcycle**
2. **A motorcycle uses the entire lane and why**
3. **Motorcycles have 2 wheels, Cars have 4**
4. **Less Lights**
5. **No doors/ exposed to the elements**
6. **The controls are different**
7. **S.P.I.D.E.** if time permits

PASS OUT QUIZ, WATCH VIDEO:

1. **Place first name and date on top of quiz**
2. **Watch time left in class use test correction accordingly**

PROTECTIVE CLOTHING:

1. **Boots, ankle support and a heel for foot pegs**
2. **Long pants, chaps or other protective clothing**
3. **Shirts, long sleeve, dehydration, sunburn etc.**
4. **Jacket, again leather or armored something**
5. **Eye protection, shatter resistant Z87 frame rating**
6. **Gloves**
7. **Helmets, types, fit, care, do not remove after an accident**

RIDER EDUCATION INFORMATION and TAKE QUESTIONS

OUTLINE FOR SHARE THE ROAD PRESENTATION:

I. INTRODUCTION

Who you are- Thank the school and teacher for having you. Introduce yourself and others with you. "*If possible put your names on the chalkboard."* Tell what you do for a living and a bit about your family. Show you are a regular person.

Stereotypes - make a point of explaining to the kids why it is important to NOT to stereotype bikers into one category of Hell raising, big, hairy bikers as we used to be (and sometimes still are) classified into. Explain that you'll see folks from all walks of life riding motorcycles now (movie stars, athletes, doctor's, lawyers,etc.).

Whom you represent - Ask if they know what ABATE stands for. *" write: A Brotherhood, Aimed, Toward, Education on the chalkboard or use a flip chart"* Tell a bit about ABATE. Tell about our education programs, Explain we are a motorcycling rights organization for all motorcyclist, give our number of members, As of the end of 2005 we are over 7,000 members state wide.

How long you have been riding - Explain how long you have been riding, the different types of riding you may have done, and some of the different bikes you may have owned through the years. This builds credibility to you as the speaker.

Why you are here today – Explain Share the Road is aimed to help the new and inexperienced driver safely share the road with motorcycles. Tell the students that STR is all about - SAVING LIVES. "ABATE believes that education is the key to safety and reducing accidents." *"Write on the chalkboard or use a flip chart"*

II. QUESTION THE AUDIENCE -

How many have ridden on a motorcycle?

As a Passenger *"Show of hands"*

As a driver *"Hands up"*

Has anyone driven a moped, ATV, etc.

Have you been behind the wheel yet? *"In some classes we have been the first guest speaker and the students are still on the simulators. "*

So most or all have an idea of what its like out on the roadway.

Reasons for Riding A Bike - make this an open question to the kids and have them give you answers - Don't be surprised if someone pipes up with "because it makes you look cool" We get some really good answers. *" Have prizes ink pens, key chains, etc. in your pocket as the students answer pass or toss them a prize. This promotes class participation and sends the message this is not just another boring presentation. This also builds credibility as to why we as the speaker ride."* Some of the answers we generally get are

1. In the wind
2. Transportation
3. Fuel efficient
4. Easily Parked
5. Feeling of freedom
6. Got your "knees in the breeze"
7. Challenging

III. STATISTICS

Last Decade Overview – Motorcycle fatalities declined from 1990 to 1996 then have risen steadily every year since. As we will see shortly one reason may be

there are more motorcycles the road today than just a couple years ago. Using numbers from the National Highway Safety and Transportation Administration and the Iowa Department Of Transportation we see that.

In 2002 Across The USA There Was 3,244 Motorcycle Fatalities

In Iowa There Were
41 Fatalities in 2002
51 Fatalities in 2003
37 Fatalities in 2004
46 Fatalities in 2005
57 Fatalities in 2006
61 Fatalities in 2007

Harry Hurt Report and the National Highway Safety and Transportation Administration – Explain the Hurt report and how it is still the most complete study of motorcycle crashes done to date. *" We draw a circle to represent all the crashes studied in the Hurt report. We then add pie cuts as we explain the percentages as listed. When I am done it looks like a peace sign. "* What they found was that 2/3 of these motorcycle accidents involved a car, truck, or van violating the right of way of a motorcycle. Also according to the National Highway Safety and Transportation Administration close to one third involves a motor vehicle turning left in front of that motorcycle, as a motorcyclist we call this the LETHAL LEFT TURN. Also in the Hurt Study almost half of the accidents involved alcohol by the auto driver the motorcycle driver or both. Drinking and driving anything DONOT mix. We wish we could stand up here and say all motorcyclist ride responsibly but that just isn't true. But there are more of us out there today that do ride responsibly, so please don't judge us by the few that don't. *" Use only statistics we have backed up in your Instructors Guide. By using a statistic that is not accurate or can't back up your credibility with the class and the teacher will break down. Don't spend too much time on statistics with students, they will get bored fast and tune you out. "*

IV. SET UP SUNNY DAY DEMONSTRATION - We call this the "sunny day" demonstration. The kids all close their eyes and you set them up to be involved in a motorcycle/motor vehicle accident. This is where you really end up jolting the kids to EMPHASIZE the seriousness of the reality of the accident and the consequences of hitting a motorcycle with their car. If you do this right, you WILL have their attention and dead silence in the room.

Examples - this is a good time to give an example of a person you know who was either killed or injured in a car/bike accident. Reality and personal experience lends a lot to this presentation and it is good if you can relate to the kids what happened and how it affected the person who was involved and how it affected you. You may also ask if they know anyone involved in a fatal motorcycle crash. You will have the kids' undivided attention, and the teachers really respect that you make a point of this. Show the kids your R.I.P. patches and ask them what

R.I.P. means? They know and they'll tell you. *" Use only personal stories that have been approved by your division supervisor or district str officer. "*

V. BIKE VS. CAR - DIFFERENCES

Bike Pictures - show the kids the boards you have made up as props with different types of bikes (cruisers, sport bikes, touring bikes, etc) and the different types of riders on them (male, female, old and young). The point being that kids will see all types of persons riding motorcycles these days.

You may open this up as a question such as " What are the differences between motorcycles and cars? " Just be sure to include all the points below when you are finished.

1. Motorcycles are smaller- This makes them harder to see. Ask them: "When a car hits a bike, and the police ask the driver "What happened?" - what's the most common answer? The kids will come right back with "**I Didn't See The Motorcycle" -** this will happen 99% of the time. Look once for other vehicles, look a second time specifically for motorcycles.

Because they are smaller this makes it harder to determine the speed of a motorcycle. Use this two-second rule, Always try to judge the speed of a motorcycle for at least two seconds before making a decision, especially in problem areas for all vehicles. These include intersections, entering a roadway from a private drive, entering a roadway from parking lots, Freeway on or off ramps, other drivers' blind spots. Go over the side mirror blind spot and ask them to remember to look at least twice before changing lanes. *"Most times the class has already covered this blind spot. Use chalkboard or flip chart to show this. "*

A BIKE USES THE ENTIRE LANE AND WHY – *"Draw a diagram out on the blackboard or use your flipchart that shows a van and car on a roadway with the 3 riding lanes behind the van*." Involve the kids by asking them what part of the lane they think they bike should ride in (left, right or center)? Explain to them why a motorcyclist will use the entire lane possibly to avoid debris or objects in the road. Remind them to give a motorcycle the same space your would give another car.

Next explain how a bike behind a van can't be seen, this is another blind spot for motorcyclist. Relate this to the lethal left turn we used in the NHSTA and Hurt report. *" Use the chalkboard or flipchart to show this blind spot. This is close to one third of accidents between cars and motorcycles"*

2.Motorcycles have 2 wheels; Cars have 4 wheels – *"Most of the time the kids will bring this one up when you ask about the differences."* Explain that most curves are turned on a motorcycle by leaning using foot pegs instead of steering like a car. Also a passenger on a motorcycle by law must have at least foot pegs and a seat to allow leaning by the passenger too.

3. Less lights – Explain most motorcycles automatically light the headlight when the bike is turned on but some older motorcycles don't have that feature. Some motorcyclist are using other methods to be seen in traffic, such as a light bar with extra lights, or a modulating headlamp control that makes the headlight look as if it's flashing. These are ways motorcyclists are using to try to be seen in traffic.

4. No doors/ exposed to the elements – Explain if I am riding and the weatherman is wrong, and are they ever right? I still have to get home or where I am going. The road gets slick when it first starts to rain, there is a slick layer of oil that lies on the roadways from engine and transmission leaks. That's why you may see bikes in the rain waiting on the side of the road. Watch for motorcycles when pulling over in heavy rain. Some people say you just need to watch out for motorcycles in the summer many of us ride in the winter also. So remember to watch in all weather for motorcycles all year round.

5. Controls are different – *"The kids will most likely bring this one up also"* Briefly cover the differences between the controls on a car and a motorcycle. Use this to explain that when a road hazard is encountered a motorcyclist has more going on than a car. Reinforce that a motorcyclist needs the same space as a car on the roadway. Explain how we show a road hazard to each other when riding in a group. Use this to show them how them by being a more aware motorist and paying attention us you your self could avoid a huge pothole or road hazard and a possible repair bill.

S.I.P.D.E. - SCAN, IDENTIFY, PREDICT, DECIDE, AND EXECUTE *" If time permits you may want to add this. "*

1. Write this out on the board and go over what it means - another group participation time.
2. If they've already had this in their driver education curriculum, just briefly go over and ask them what the letters S.I.P.D.E. mean.

VI. PASS OUT THE QUIZZES - WATCH THE VIDEO "A COMMON ROAD"

1. Students will watch the video and fill out the quiz. Tell them as you are passing out the quizzes that ALL the answers to the quiz are contained in the video, so they should get them all correct!
2. After the video, go over the questions on the quiz. If you're short on time, just point to a student and have them give their answer to that question. You should see lots of hands up to answer the questions, and make sure to pass out your little "prizes" for good answers!!

VII. PROTECTIVE CLOTHING

In this section we explain what we wear for protective clothing and why we wear it. We do wear this gear for safety and not to look like motorcyclist in the movies. There are many looks today that also offer protection.We go from the shoes up when we go through the protective clothing part of our class. We will normally pick a student (usually one that we have had participate well in the class, or maybe the "class clown", or sometimes even the driver education teacher), and bring them up front.

1. We always start with why it's not a good idea to ride in shorts and sandals or tennis shoes - we may ask a couple kids who are wearing shorts or sandals if what they are wearing would be safe to ride a motorcycle with. We tell them that a good pair of boots that go over their ankle with a heel are best for a motorcycle. Explain that with a heel you get a better foot grip on foot pegs. Ask why you should have at least over the ankle boots? Cover what happens when a bare leg accidentally touches a hot motorcycle exhaust pipe - third degree burns instantly.

2. That will lead you into why we wear at the very least, JEANS, on a motorcycle so we don't accidentally get burned even just getting on and off a motorcycle. From the jeans lead into why some of us wear chaps, we wear them to protect us from road rash if we go down on the road. Generally we use a statistic or two from the drag test. *"you can use this time to vary class time greatly watch that clock"* We talk about how far jean lasted, about 3 to 4 feet. We mention that thinner leather didn't hold up as well as good heavy competition weight leather. Competition leather was drug 86 feet before the abrasion wore through it. You may dress your "volunteer" that you have up front in a pair of chaps that you have brought to the class for this purpose. The kids will see what you're doing with your volunteer, and they'll see them changing in to a biker right before them.
3. Move on up to shirts - we explain that while we do ride in t-shirts in the summer, sometimes it's best to ride in a long sleeve shirt even in hot weather. The reason behind this is that since the sun and wind will dehydrate you skin faster on a motorcycle going down the highway in the wind, they will SUNBURN faster if they're wearing less than a long sleeve shirt on a motorcycle. Make sure they at least use a good sunscreen.
4. On to the jacket. Grab your leather jacket that you have brought with you and let your "volunteer" put on the leather jacket and be really cool!!! Just make sure the kids know that this goes right along with the chaps in protecting your skin in case of a crash and that the jacket and chaps are very warm in cool weather.
5. Ok, now to the gloves. Bring along a pair of fairly large leather gloves (full-finger), and have your "volunteer" put these on. These are more skin protection.
6. On up to their eyes. Tell them that they should ALWAYS wear some kind of eye protection over their eyes while riding a motorcycle. Explain that some glasses are shatter resistant and therefore are better for a motorcycle. All glasses that are shatter resistant have an ASTM rating on the frame. They are marked with a Z87 someplace on the frame. Make sure that they understand that if they wear sunglasses on a bike, that's good but they must be made of a shatter resistant material as well in order to be safe. Give them an example. If they're riding down the road on a bike, and the vehicle in front of them throws up a rock, or a June bug flies into them and it hits them in the eye at 60 miles per hour - it could put their eye out if they're not wearing something shatter resistant over their eyes. If time permits ask them what happens if the lose their vision at 60 mph because they get hit in the eye - they usually answer that they will wreck the motorcycle because they can't SEE. Make sure that they know that cheap sunglasses that are not shatter resistant and will shatter when hit and the pieces will go into their eye - same effect - they could lose their eye. Now your "volunteer" gets to don the really cool pair of shatter resistant glasses or goggles that you have brought with you.
7. Ok, here's the final part of protective gear - helmets. Yes, we do bring helmets into the classroom with us, and always more than one type of

helmet. Be advised that if you don't cover this part of protective gear with these kids, you probably won't be asked back to that school again. It all goes back to the idea that these are just kids, and you are just explaining different kinds of protective gear - you're not necessarily advocating anything. Approach the subject from the aspect of different types of helmets available. Start with the basic D.O.T. approved helmet as being the minimum certification of any helmet they put on their head. We show a half shell D.O.T. approved helmet. We tell the kids that if a helmet does not have at least a D.O.T. certified sticker on it, don't put it on your head. Then we show a full-face helmet that has a SNELL certification on it as well as a D.O.T. certification on it and we explain that this helmet has been tested to a higher level than the basic D.O.T. helmet. We also mention that ANSI tests and certifies helmets. Last of all we explain that a helmet is good for ONE impact ONLY. If you drop your helmet, you might as well replace it because you will never know if it's safe to use again or not. We tell them if they ever are at an accident scene DONOT remove a helmet from a fallen motorcyclist leave that to qualified people. Always assume there is a neck and or back injury until help arrives. So now you have your "volunteer" completely outfitted in rider gear - and so thank them We try to have a couple of prizes for this person, and have everybody in class give them a hand for being a good sport and helping you out! This is one of the most fun parts of the class - the kids really love watching you dress up one of their classmates into a "biker person" right in front of them.

CLOSING If any students want their class M endorsement before they are 18 in Iowa they must take a Rider Education Course. We recommend they take a course no matter how old they are before learning to ride. Have information of the Rider Education courses offered by ABATE of Iowa and various community colleges around the state. Or you can refer them to the MSF phone number at the end of the video or the ABATE website (www.abateiowa.org) for more information on an ABATE course offered in their area. Cost range from $95 and up.

End your presentation with something like "Remember to look twice before changing lanes. Please be safe out on the road and LOOK OUT FOR ??? - they hopefully will answer **MOTORCYCLES!!!!** "

Rules and Tips

1. Expense reports must be turned in monthly receipts or mileage older than 30 days will not be paid. This is a rule for all of ABATE of Iowa not just Share the Road.
2. Get your presentation reports filled out.
3. Turn in you numbers at least monthly.
4. Be accurate with all your information; have back up as to where you got it and the information. Generalize numbers or information when ever reasonably possible.
5. Too many personal stories can take away from basic classroom curriculum. Keep them short and to the point. In the future we may need to get division leaders or district STR coordinators to approve them.

6. You must be mentored in to the program. To earn your patch you must have taught a class on your own in front of a STR officer.
7. Don't argue the helmet issue STR is here to keep the accident from happening in the first place.

Some Idea's for Those Helmet Questions

1. In any accident injuries are often incurred to areas not protected by some form of safety device as well as areas that are protected. Deaths and life altering injuries also occur in these same situations. Our goal and reason for being here today is to educate and inform all of the motoring public of ways that we can work together to prevent accidents from happening in the first place. Safety devices are a good idea but a better idea is ACCIDENT PREVENTION.
2. As with seatbelts, airbags, rollover cages, and other forms of protection devices the helmet is a good means of protection once an accident happens. But no form of protection can stop that accident from occurring. Only you, the drivers and operators of the vehicles can do that. It is only through education and understanding of the needs of other types of vehicles that we can all drive defensively, considerately, and aware enough to prevent the accident from happening in the first place. That is why we are here today.
3. We are not here to argue the benefits of wearing a helmet. Every year there are hundreds of cyclist killed or injured in motorcycle accidents. Most of those deaths and injuries are the result of trauma to other parts of the body. A helmet may or may not have helped them, and some were wearing one. The bottom line is that no protective device prevents the accident from happening. Our goal in being here today is to inform and assist you to know how to recognize cyclist, how to respond to us, and how to know what maneuvers we are making and why we must make them so that together we can prevent the accidents from ever happening.
4. The focus of today's program is accident prevention. Additional safety protection devises are not guaranteed to protect you from all types of injuries that may result from an accident. Some of those injuries may result in death or life altering circumstances. We want to prevent the accident from ever happening in the first place by educating and sharing what it takes for all of us to safely share the roadway together, whether you are in a car, riding a motorcycle, or driving an 18 wheeler. If you never get involved in an accident you will never have to worry about any kind of injury. Protection is good and we advise it, but prevention is better.

Cars and Motorcycles

1. When you think of a motorcyclist, what is the first impression that comes to your mind?_____

2. Why is it important to treat motorcycles with respect and give them room on the road?

a. A motorcyclist is much more vulnerable to injury or death in a collision.

b. Motorcyclist have the same rights on the highway as motorist.
c. The motorcyclist could be your next door neighbor.
d. All of the above

3. What is the most common collision between cars and motorcycles?
a. When a car backs out of a driveway into the motorcycle's path.
b. When a car changes lanes and broadsides the motorcyclist.
c. When the motorcyclist is rear-ended by a car.
d. When a car turns left in front of an oncoming motorcycle.

4. Motorcycles are smaller than cars. This makes them:
a. Faster **b.** More difficult to see. **c.** Harder to control. **d.** Less stable.

5. How many times should you check for motorcycles or other traffic before proceeding through a intersection?
a. 1 **b.** 2 **c.** 3 **d.** 4 or more

6. What portion of a lane will a motorcycle ride in most of the time?
a. left side of the lane. **b.** Right side of the lane. **c.** Center of the lane. **d.** Depends on traffic

7. Why do motorcyclist change lane positions?
a. To get a better view of oncoming traffic. **b.** To attract attention.
c. To avoid an obstacle in the road. **d.** All of the above.

8. What should you do when being passed by a motorcyclist?
a. Maintain speed and lane position until the motorcyclist has passed.
b. Speed up so that the motorcyclist can pull in behind you.
c. Change lanes in order to give the motorcyclist more room.
d. None of the above.

9. You see a motorcycle with its turn signal flashing. you should:
a. Assume the motorcyclist will be making a turn.
b. Proceed so that the motorcyclist can make his or her move.
c. Wait until the motorcyclist's intention is clear before proceeding.
d. All of the above.

10. When following a motorcyclist what's the minimum distance that should be between you and the motorcycle?
a. 20 feet. b. 2 seconds. c. 2 car lengths. d. 2

Answer Key to A quiz

2-D
3-D
4-B
5-C

6-D
7-D
8-A
9-C
10-B

I.P.D.E. is a common teaching tool used in drivers education classes if time permits we ask them to add a S. on to it.
S = Search and Scan
I = Identify potential hazards
P = Predict possible hazards
D = Decide course of action if needed
E = Execute action if needed

Iowa Motorcycle License and Crash Data History

Year	Fatalities	Injuries	Registrations	License Holders
1970	43	1,366	60,835	
1971	41	1,682	78,902	

1972	66	2,160	97,354	
1973	72	2,823	118,545	
1974	66	2,851	138,021	
1975	62	2,428	148,663	
1976	68	2,600	151,131	
1977	69	2,600	159,509	222,417
1978	74	2,600	174,548	233,954
1979	82	2,463	190,000	247,991
1980	76	2,737	205,000	262,295
1981	74	2,661	203,000	
1982	66	2,048	200,000	
1983	54	2,079	185,687	
1984	44	2,091	195,515	
1985	57	1,915	187,428	
1986	53	1,816	172,444	
1987	57	1,681	163,521	
1988	58	1,508	145,967	
1989	42	1,372	139,038	
1990	37	1,264	133,313	
1991	38	1,221	128,913	
1992	29	1,052	124,223	
1993	39	893	118,674	214,931
1994	30	865	115,358	217,895
1995	43	820	111,503	216,590
1996	16	710	108,670	215,316
1997	26	679	107,473	213,626
1998	27	638	109,235	214,521
1999	30	652	107,645	215,537
2000	32	771	110,395	215,660
2001	38	730	120,961	217,566
2002	41	793	124,230	221,495
2003	51	867	N/A	224,042

Report prepared by Scott Falb of the Iowa D.O.T.

Reprint from a Sept 88 "Cycle" magazine article "Abrasion Testing: Torn in the USA".

Web site http://www.kawasakimotorcycle.org/forum/viewtopic.php?p=17721

Drag Test

"For the Drag Test, samples were stitched to a bag that held a 75-pound sandbag inside a milk crate, then dragged behind a pickup truck..."

New, 100% Cotton Denim Jeans ---------- 3' 10"
Senior Balistic Nylon ---------- 3' 10"
Leather, Lightweight, Nude Finish, 2.25 oz/sq. ft. --- 4' 3"
Leather, Fashion Weight, 1.75 oz/sq ft. ---------- 4' 4"
Two-year-old 100% Cotton Denim Jeans ---------- 4' 5"
Cordura Nylon Type 440 ---------- 18' 3"
Kevlar 29 Aramid Fiber, Style 713 ---------- 22' 1"
Leather, Competition Weight, 3 oz/sq. ft. -------- 86' 0"

Taber Test

"For the Taber Test, the specimen was mounted on a rotating platform and scuffed by two rubber-emery grinding wheels." The numbers represent the number of revolutions until the fabric totally fails. A vacuum clears debris.

Two-year-old 100% Cotton Denim Jeans 168
New 100% Cotton Denim Jeans 225
Kevlar 29 Aramid Fiber, Style 713 506
Cordura Nylon, Type 440 559
Leather, Lightweight, Nude Finish, 2.25 oz./sq. ft. 564
Leather, Fashion Weight, 1.75 oz./sq. ft. 750
Senior Ballistic Nylon 817
Leather, Competition Weight, 3 oz./sq. ft. 2600

More to consider...

"Finally, protection from road abrasion cannot be guaranteed by a materials abrasion resistance alone. A jacket may have panels of highly abrasion-resistant materials, yet if low-quality stitching joins those panels and the seams come apart upon impact or during a slide, then the abrasion resistance of the panels could count for nothing. Furthermore, an ill-fitting garment may ride up in a slide, contorting the body and exposing the skin. And the best jacket in the world, left unzipped and/or unsnapped, won't give riders the protection they pay for. When it comes to safety, the issues are more complex than just the abrasion resistance of materials."

The Anatomy of a Motorcycle Crash

A motorcycle crash. A motorcycle crash is a complex event involving the interaction of human, vehicle, and environmental factors. While there is no “typical” motorcycle crash, what is “typical” is that a motorcycle crash is a violent event. More than 80 percent of all reported motorcycle crashes result in injury or death to the motorcyclist. The motorcycle itself provides no head injury protection to the rider or passenger. Ejection from the motorcycle is a common injury pathway. If a motorcycle comes to a sudden stop

and the rider is ejected from the motorcycle, the rider will forcibly strike objects in the path as well as the ground.

Vehicle differences. A motorcycle lacks the crashworthiness and occupant protection characteristics of an automobile. An automobile has more weight and bulk than a motorcycle. It has door beams, a roof, airbags, and seat belts. It is also more stable because it is on four wheels. Because of its size, an automobile is easier to see. What a motorcycle sacrifices in weight, bulk, and other crashworthiness characteristics is somewhat offset by its agility, maneuverability, ability to stop quickly, and ability to swerve quickly when necessary.

Causes of motorcycle crashes. In 1996 there were 67,000 motorcycles involved in police-reported crashes, of which 40 percent (27,000) were single vehicle crashes.[6] Many of the causes of motorcycle crashes may be attributed to lack of experience or failure to appreciate the inherent operating characteristics and limitations of the motorcycle. These factors require motorcyclists to take special precautions and place more emphasis on defensive driving. A motorcyclist, for example, has to be more alert at intersections, where most motorcycle-vehicle collisions occur**. About one-third of multi-vehicle motorcycle crashes are a result of other motorists turning into the path of the motorcycle. More than other vehicle drivers, motorcyclists must remain visible at all times, and anticipate what might happen. For example, motorcyclists must anticipate that drivers making left turns may not see them and prepare to make defensive maneuvers.** They also must be more cautious when riding in inclement weather, on slippery surfaces, or when encountering obstacles on the roadway. Motorcyclists must place greater reliance on their helmet, eye protection, and clothing to reduce the severity of injury should they become involved in a crash. And they should attend a motorcycle training course to learn how to safely operate a motorcycle. Approximately 43 percent of all fatal motorcycle crashes involve alcohol.7 A motorcycle requires more skill and coordination to operate than a car. Riding a motorcycle while under the influence of any alcohol significantly decreases an operator's ability to operate it safely.
An estimated one-third of motorcycle operators killed in crashes are not licensed or are improperly licensed to operate a motorcycle.8 Being licensed to operate a car does not qualify a person to operate a motorcycle. By not obtaining a motorcycle operator's license, motorcyclists are bypassing the only method they and the state licensing agencies have to ensure they have the knowledge and skills needed to safely operate a motorcycle.

The helmet at work. The single most important safety device a motorcyclist can have is a helmet. Motorcycle helmets have a hard outer shell that distributes the force of an impact to protect the skull and prevents objects from piercing it. The crushable inner liner limits the force of impacts by absorbing a portion of the energy that would otherwise reach the head and brain. As the helmet does its job, the number and severity of head injuries are significantly reduced.

Helmets cannot work if they are improperly designed. Federal safety standards determine the amount of force helmets should absorb and the amount of peripheral vision the helmets must allow. Only helmets that meet or exceed these standards should be worn.
Information from the NHSTA web site web address is:
http://www.nhtsa.dot.gov/people/injury/pedbimot/motorcycle/safebike/anatomy.html

1981 Harry Hurt Report Short Summary

A Complete Copy of the Summary Can be Found At http://www.magpie.com/nycmoto/hurt.html

Throughout the accident and exposure data there are special observations, which relate to accident and injury causation and characteristics of the motorcycle accidents studied. These findings are summarized as follows:

1. Approximately three-fourths of these motorcycle accidents involved collision with another vehicle, which was most often a passenger automobile.

2. Approximately one-fourth of these motorcycle accidents were single vehicle accidents involving the motorcycle colliding with the roadway or some fixed object in the environment.

3. Vehicle failure accounted for less than 3% of these motorcycle accidents, and most of those were single vehicle accidents where control was lost due to a puncture flat.

4. In single vehicle accidents, motorcycle rider error was present as the accident precipitating factor in about two-thirds of the cases, with the typical error being a slide out and fall due to over braking or running wide on a curve due to excess speed or under-cornering.

5. Roadway defects (pavement ridges, potholes, etc.) were the accident cause in 2% of the accidents; animal involvement was 1% of the accidents.

6. In multiple vehicle accidents, the driver of the other vehicle violated the motorcycle right-of-way and caused the accident in two-thirds of those accidents.

7. The failure of motorists to detect and recognize motorcycles in traffic is the predominating cause of motorcycle accidents. The driver of the other vehicle involved in collision with the motorcycle did not see the motorcycle before the collision, or did not see the motorcycle until too late to avoid the collision.

8. Deliberate hostile action by a motorist against a motorcycle rider is a rare accident cause. The most frequent accident configuration is the motorcycle proceeding straight then the automobile makes a left turn in front of the oncoming motorcycle.

10. Intersections are the most likely place for the motorcycle accident, with the other vehicle violating the motorcycle right-of-way, and often violating traffic controls.

11. Weather is not a factor in 98% of motorcycle accidents.

12. Most motorcycle accidents involve a short trip associated with shopping, errands, friends, entertainment or recreation, and the accident is likely to happen in a very short time close to the trip origin.

13. The view of the motorcycle or the other vehicle involved in the accident is limited by glare or obstructed by other vehicles in almost half of the multiple vehicle accidents.

14. Fuel system leaks and spills were present in 62% of the motorcycle accidents in the post-crash phase. This represents an undue hazard for fire.

15. The median pre-crash speed was 29.8 mph, and the median crash speed was 21.5 mph, and the one-in-a-thousand crash speed is approximately 86 mph.

16. The typical motorcycle pre-crash lines-of-sight to the traffic hazard portray no contribution of the limits of peripheral vision; more than three-fourths of all accident hazards are within 45deg of either side of straight ahead.

17. Vehicle defects related to accident causation are rare and likely to be due to deficient or defective maintenance.

18. The motorcycle riders involved in accidents are essentially without training; 92% were self-taught or learned from family or friends. Motorcycle rider training experience reduces accident involvement and is related to reduce injuries in the event of accidents.

19. Almost half of the fatal accidents show alcohol involvement.

20. The typical motorcycle accident allows the motorcyclist just less than 2 seconds to complete all collision avoidance action.

21. The use of heavy boots, jacket, gloves, etc., is effective in preventing or reducing abrasions and lacerations, which are frequent but rarely severe injuries.

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