

# **RIDERS HELPING RIDERS**



## **INSTRUCTOR'S GUIDE**

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16. Abstract Riders Helping Riders (RHR) is an instructional program designed to encourage motorcyclists to intervene to prevent drinking and riding by their motorcyclist peers. The program is based on focus group research which found that riders consider themselves to be united by an interest in riding, and willing to help other riders in need, but that a sense of individualism limits the extent to which riders are willing to intervene in drinking and riding. RHR is intended to convince motorcyclists that an impaired rider needs their help, and that they are in the best position to provide help. The program provides a "toolkit" of techniques for separating drinking from riding, discouraging riders from becoming impaired, recognizing impairment, and discouraging impaired riders from riding. An optional role-playing module is included. At the end of class, students are asked to sign a pledge to do their best to help an impaired rider live to ride another day. RHR was developed with the assistance of instructors from the South Carolina Rider Education Program and pilot tested by instructors of Georgia's Department of Driver Services, Motorcycle Safety Program.					
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# INTRODUCTION FOR INSTRUCTORS

*Riders Helping Riders* is based on research showing that motorcyclists view themselves as members of a community and that they take care of each other when needed. However, riders often express an unwillingness to intervene in the drinking and riding of fellow riders. The researchers concluded that there was a tremendous opportunity to reduce death and injury due to drinking and riding by convincing riders of the appropriateness of intervening in drinking and riding, and by providing them with the tools to do so. That is what this program is designed to do.

The main goal of this program is to get riders to intervene in the drinking and riding behavior of their *peers*.

*Riders Helping Riders* has been designed as a standalone curriculum. It is not intended to replace any alcohol-related training provided in any other training program you might be using. Consult with the director of your State's motorcycle safety training program to determine where to include *Riders Helping Riders* in your syllabus.

It is helpful to understand the overall structure of *Riders Helping Riders*. Following is a brief description of the program:

*Introduction* – this brief section introduces students to the notion that riders feel a connection to other riders, and this often leads riders to look out for each other and help each other when they can. This is an important concept in the subsequent discussion on riders helping other riders avoid drinking and riding.

*Reasons to Help* – This section provides a background to the drinking-and-riding problem; the increasing number of motorcyclists who are being killed while riding, the high percentage of motorcyclist fatalities that involve drinking and riding, and the need for riders to intervene.

*How to Help* – This section gives students a “toolkit” they can use to help prevent impaired riding. The tools are organized in chronological order, from steps that can be taken early on to prevent riders from becoming impaired to steps that may be necessary if all else fails and an impaired rider is about to ride. Because this section contains the majority of information, it is the longest section of the program. The subsections of *How to Help* are described below:

*Separate the drinking from the riding* – ways to prevent impaired riding by keeping riders away from alcohol when they will be riding

*Provide alternatives to drinking* – ways to prevent or reduce rider's consumption of alcohol when it is available

*Recognize impairment* – ways to recognize riders who are impaired or becoming impaired so that steps can be taken to keep that impairment from getting worse, and to prevent impaired riders from riding

*Discourage impaired riding* – ways to discourage riders from riding should they become impaired

*Prevent impaired riding* – ways to prevent an impaired rider from riding when he or she cannot be dissuaded from riding.

*Promising to Help* – This is a discussion of what students will do in the future to help riders to not ride impaired.

*Role Playing Exercises* – This is an optional exercise available to classes that have enough time to conduct them. The purpose of role playing is to provide students with practice at applying the information they've learned and to allow them to become comfortable with taking steps to intervene.

The *Riders Helping Riders* curriculum contains group and breakout discussion sessions. Group discussion should be held amongst the group as a whole. In breakout discussions, the class should be separated into groups of about 5 to 6 students each. The number of groups will depend on the size of the class. For each breakout discussion, assign different questions to each group and tell them the general area in their student guide where they can find the answers to the questions. Where there are more questions than groups, assign all questions by distributing them evenly across the groups. Groups that get fewer questions for one session can be assigned more for another. Give each group 2 to 3 minutes to find the answers and discuss them. Then have each group report their findings to the class. Expand on the discussion, as necessary and where time permits, to make certain the most important aspects of each issue are discussed.

## INTRODUCTION—6 MINUTES

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Show Riders Helping Riders video introduction.

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Motorcyclists are a minority on the road.

While the proportion of motorcyclists in traffic differs between areas of the country, time of year, and road type, statistics from the Bureau of Transportation Statistics (BTS) and from the National Occupant Protection Usage Survey (NOPUS) indicate that only one of every 250 vehicles on the road is a motorcycle.

This affects drivers' ability to see motorcycles as well as drivers' tendency to look for motorcycles.

Motorcyclists share a passion for riding, a skill that others don't have and don't necessarily understand (*"If I have to explain it, you wouldn't understand"*).

Nonriders don't necessarily understand the challenges of riding, nor do they understand why riders choose to ride. This is one of the reasons that motorcyclists tend to think of themselves as a closed community.

Members of this closed community may feel a responsibility to look out for one another.

The phrase *"If I have to explain it, you wouldn't understand"* is often used to describe the enjoyment riders get from riding.

Riders often choose to socialize with other riders.

Riders may socialize with each other as part of group rides, or they may be together just to socialize with or without their bikes. Either way, there is often an opportunity to ride after drinking, which means there is both an increased risk and an opportunity to reduce that risk by intervening in other riders' drinking-and-riding behavior.

Motorcyclists have been known to help out other riders, sometimes riders who are friends, sometimes even strangers.

Riders tell stories of pulling over to assist another motorcyclist whose cycle is broken down on the side of the road. This willingness to help others does not generally extend to drivers of cars.

With riding on the increase, there are more and more people who have motorcycling in common.

Most people who are interested in motorcycling believe that more people are riding today than in years past. Figures on the number of registered motorcycles in the country show a steady increase every year from 1998 to 2004 (the last year for which data is available). The Motorcycle Industry Council reported in February 2007 that the motorcycle industry has been growing (selling more motorcycles) every year since 1992. On the other hand, the Federal Highway Administration reports that the number of vehicle miles traveled by motorcycles has remained fairly constant since the early 1980s.

The more riders there are on the road, the more people there are potentially in need of help or guidance in terms of drinking and riding or otherwise.

Many of the new riders are joining riding groups and socializing with other riders, possibly in drinking situations. This increase in ridership increases the potential number of drinking riders. However, the opportunity to teach these many new riders the importance of peer intervention also creates a potential impact on drinking and riding within the larger motorcycling community.

**Would You Help?**

**Group Discussion Questions**

Would you stop and help a rider you know?  
Why? Why not?

Would you stop and help a rider you do not know? Why? Why not?

Would you do the same for a driver of a passenger car?

This section should be discussed with the group as a whole, rather than in breakout sessions.

This section is included to encourage participants to discuss the extent to which they would help other riders in general and to show that riders tend to help other riders to a greater extent than for drivers of passenger vehicles.

***Riders Helping Riders: Helping the Drinking Rider***

Segue from riders helping riders in general, to riders helping drinking riders.

## REASONS TO HELP—7 MINUTES

This section contains background information that explains why it is important to intervene in drinking and riding.

### Breakout Discussion Questions

What does “Figure 1 – Fatal Motorcycle Crashes” tell us? (student guide page 2)

What does “Figure 2 – Alcohol Involvement in Fatal Crashes by Vehicle Type” tell us? (student guide page 3)

What does “Figure 3 – Low Alcohol Levels in Fatal Crashes by Vehicle Type” tell us? (student guide page 3)

Have you ever driven or ridden after drinking because you thought you were OK, then the next day you realized how impaired you really were? What does this mean when it comes to letting people decide if they can ride safely? (student guide page 4)

What’s the difference between being impaired, visibly intoxicated, and over the limit? (pages 3-4)

Fatal motorcycle crashes have increased steadily since 1998.

See Figure 1 – Fatal Motorcycle Crashes.

This figure shows that, after a long period of decrease in motorcyclist fatalities, the number of fatalities began to increase in 1998 and have continued to increase ever since.

Students are likely to recognize that this increase may be due in part to an increase in motorcycle ridership. It is impossible to know precisely how much of the increase is due to an increase in riding and how much may be due to other factors. This is because traditional methods of measuring exposure to crashes for passenger cars (e.g., number of licensed drivers, registered vehicles, or vehicle miles traveled) don’t work very well for motorcyclists.

The bottom line is that more people are being killed and that these numbers represent a body count. Many people are concerned by this and want these numbers reduced.



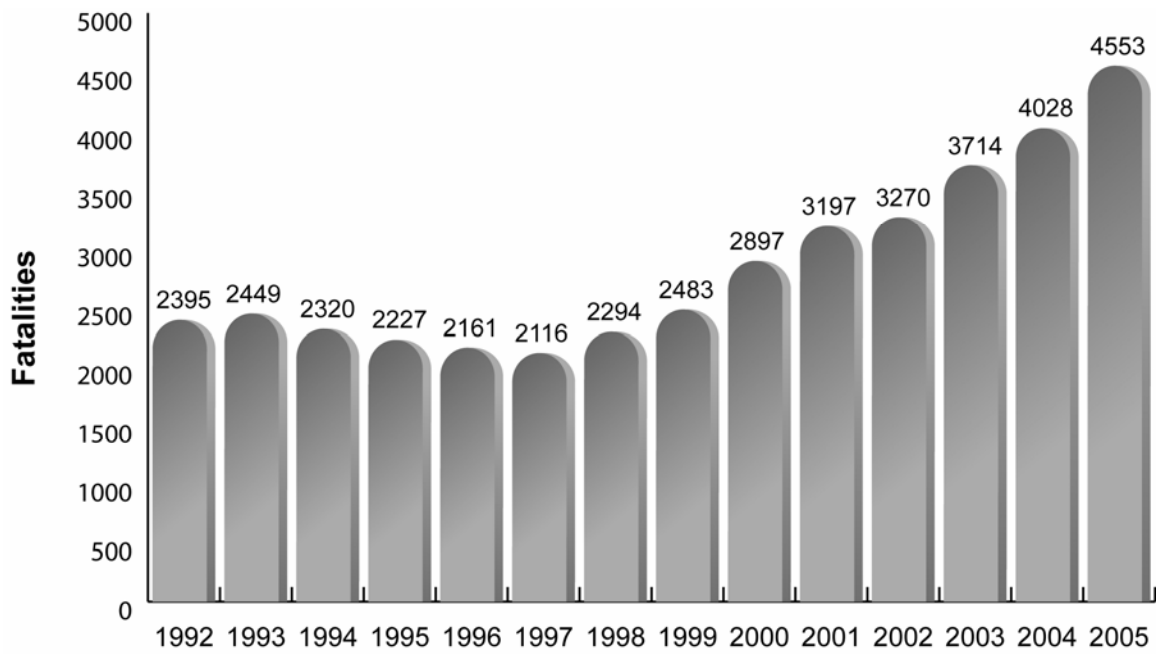


Figure 1. Fatal Motorcycle Crashes

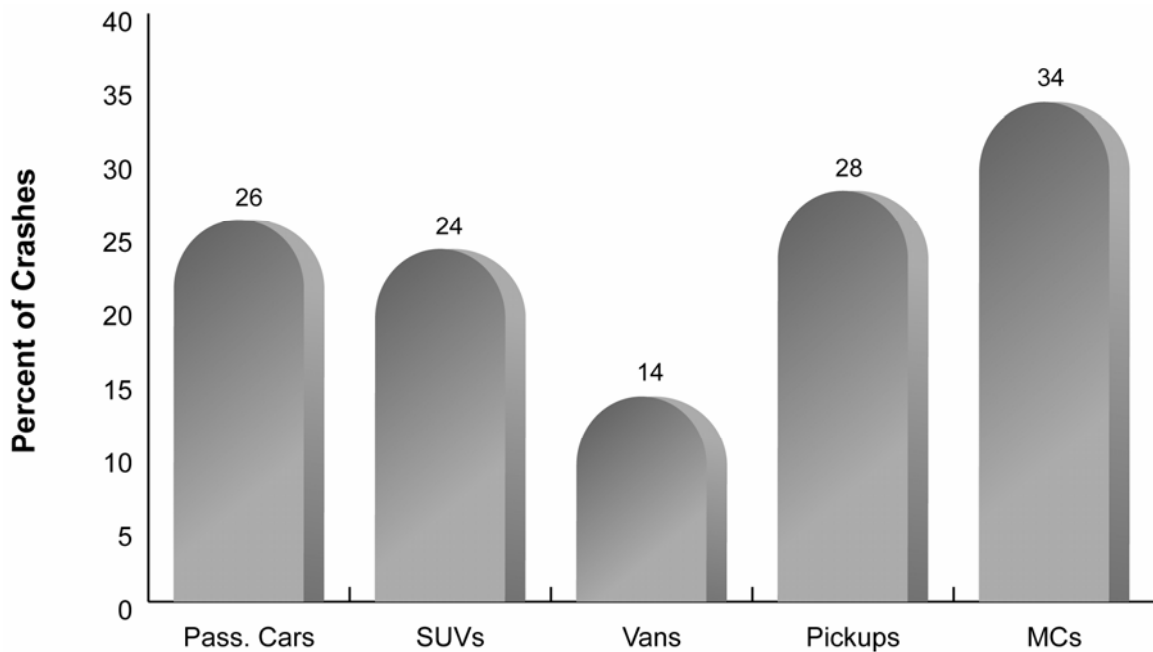
**NOTE:** The following two figures compare the alcohol use of motorcyclists in fatal crashes to that of other road users involved in fatal crashes. It is important to understand what these statistics represent. They are based on the *proportion* of drivers and riders in fatal crashes who had alcohol in their systems. They are not based on the *raw number* of people killed. Students may think that numbers for motorcyclists are higher because a motorcyclist in a crash is more likely to be killed than a driver when involved in a crash. It is important that students understand that this factor has *no* influence on these figures because these figures only show proportions of people *within* the group of people involved in a fatal crash.

Alcohol is a major contributor to fatal motorcycle crashes.

In 2005, out of 4,553 motorcycle fatalities, 1,587 (35%) involved riders with alcohol in their system. These are riders who might be alive if someone had stepped in to prevent them from riding after drinking.

See Figure 2 – Alcohol Involvement in Fatal Crashes by Vehicle Type. These statistics are based on data from crashes in 2005.

Figure 2 shows that a higher proportion of people killed on motorcycles have alcohol in their systems than for other vehicle types. This can be interpreted as a sign that motorcyclists are more likely to be under the influence than drivers of four-wheeled vehicles. This figure offers proof that there *is*, indeed, a drinking-and-riding problem.



**Figure 2. Alcohol Involvement in Fatal Crashes by Vehicle Type**

Comparing blood alcohol levels, more riders than drivers die with low levels of alcohol. The percentage of riders dying with low blood alcohol concentration (BAC) levels is significantly higher than for other vehicle types, and nearly twice that of drivers of passenger cars.

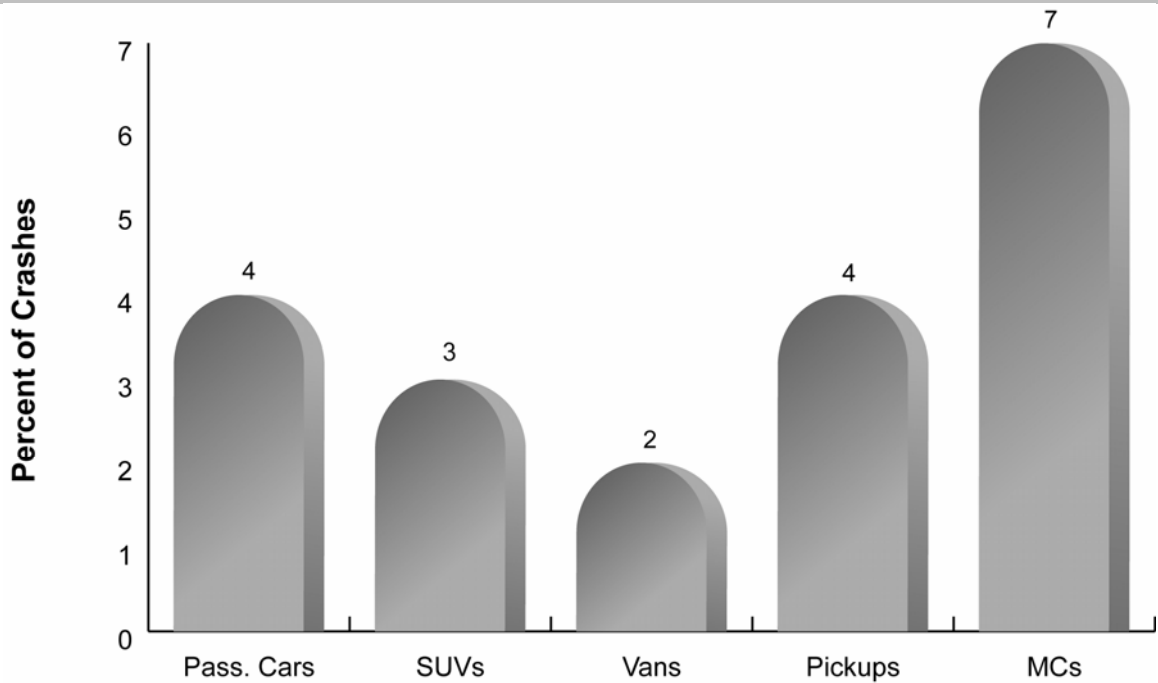
See Figure 3 – Low Alcohol Levels in Fatal Crashes by Vehicle Type. These statistics are based on data from crashes in 2005.

This figure shows that a higher proportion of riders killed in crashes are at low BAC levels (.01 - .08 grams per deciliter [g/dL]) than drivers of other types of vehicles.

This can be interpreted as an indication that it takes less alcohol to become involved in a fatal crash for riders than for drivers. This may be due to the fact that motorcycles take more skill to operate and are less forgiving of mistakes.

Students may suggest the possibility that, because motorcyclists are more likely than drivers to be killed in crashes, that those with low BACs were killed due to vulnerability rather than impairment. While this may be true to some extent, there's no way to know the increased likelihood of crash involvement at low BACs without knowing the proportion of non-crashing riders at low BACs. Currently there is no source of BAC data for the general, non-crashing riding population.

It seems likely that both explanations are true to some extent – that motorcycle operation becomes dangerous at lower BACs than passenger car operation -- and that low BAC riders appear in fatal crash data partially due to their vulnerability. To the extent that evidence suggests that motorcycle operation is impaired at lower BACs, it seems prudent to pass this information on to students.



**Figure 3. Low Alcohol Levels in Fatal Crashes by Vehicle Type**

Even if riders are not impaired enough to be over the limit, they can still be impaired enough to be a danger to themselves or others.

All States have enacted “per-se” laws that define .08 BAC as the level at which riders are deemed alcohol-impaired. Operating a vehicle while at or above this BAC level is referred to as being “illegal per se” and the limit is referred to as the “per-se limit.” Riders over this level can be charged whether they appear to be impaired by alcohol or not. Many people refer to this as the “legal limit,” though this is not strictly accurate because being *under* this limit can still be illegal. Riders and drivers under this level can *still* be charged if they have alcohol in their system that appears to have impaired their ability to ride.

Not all people react the same way to alcohol. Some riders can be severely impaired by alcohol at levels significantly lower than the .08 BAC level.

Even if riders have not had enough to drink to be *obviously intoxicated*, they can still be impaired enough to be a danger to themselves.

Research shows that alcohol starts to affect people’s abilities when there is very little alcohol in their system. Human factors performance research by Moskowitz and others (Moskowitz, Burns, & Williams, 1985; Liguori, D’Agostino, & Dworkin, 1999; Grant, Millar, & Kenny, 2000) demonstrates important cognitive and physiological consequences that can lead to poor driving-related performance at low BACs.

Given the complexity of operating a motorcycle, it is reasonable to expect that alcohol will affect riding at low BACs.

Given the consequences of making an error while riding, it seems sensible to avoid riding with any alcohol in the system.

The increase in fatal crashes for lower-BAC riders in Figure 2 illustrates this.

Participants should understand that there is a difference between being impaired, being at the “*illegal-per-se* level,” and being “visibly intoxicated.” Some people can be over the limit without being visibly intoxicated and vice versa.

Impairment sufficient to affect rider safety can occur at BACs well below reaching .08 and well before becoming “visibly intoxicated.”

You can't leave it up to the drinking rider to decide if he or she can ride safely -- a drinking rider is the least capable of knowing if he or she can ride safely.

It has long been recognized that people under the influence of alcohol are not able to assess how impaired they are. One reason for this is that judgment is one of the first things to become impaired when drinking. This is why anti-drinking-and-driving messages stopped using the message “don't drive drunk” and began using “friends don't let friends drive drunk.”

If, as a rider, you are prepared to help other riders when they're in trouble, this is one time when another rider *really* needs your help.

Riders should consider the negative consequences of *not* preventing drinking and riding compared to not helping in other ways (e.g., roadside assistance with a motorcycle that's broken down).

If you had the opportunity to stop someone from riding impaired and failed to do so, and that person was arrested, injured, or killed, how would that make you feel?

**The bottom line...**

Drinking and riding *is* a problem....

Drinking riders need help....

Riders want to help....

**You are the one to help!**

At this point in the presentation:

We have shown that *drinking and riding is a problem* by showing that increasing numbers of riders are being killed in crashes, that alcohol is a larger factor in motorcycle crashes than for other vehicles, and that less alcohol is required to affect the likelihood of a motorcycle crash.

We have shown that *drinking riders need help* by pointing out that people are not capable of accurately assessing their own impairment.

We have shown that *riders want to help* other riders in general.

Thus, it follows that riders are in the best position to help prevent the drinking and riding of peers.

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## HOW TO HELP—7 MINUTES

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The “How To Help” section is intended to provide riders with a set of “tools” that they can use to prevent drinking and riding

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What’s the best way to keep people from drinking when they will be riding? (student guide page 6, “Separating Drinking and Riding” and “Providing Alternatives to

What are some signs that a drinker is becoming moderately impaired? (student guide

What are some things you can say to convince someone who is impaired that they

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If your bike breaks down, a handy pouch can provide the tools you need to solve the problem. Let’s discuss some handy tools you can use to discourage riders from drinking and riding.

The tools kit includes ways to:

Separate the drinking from the riding

Provide alternatives to drinking

Recognize impairment

Discourage impaired riding

Prevent impaired riding

This is essentially an outline of the “How to Help” section.

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Separate Drinking and Riding

Meet at a restaurant, rather than a bar.

There are ways that riders can prevent drinking and riding by separating the drinking from the riding. This can take place on both a group and personal level:

Group Level

Plan group rides to avoid stopping at locations where drinking is likely to occur.

Avoid scheduling drinking at the end of group rides, when participants still have to get home from the drinking location.

Establish a group policy discouraging drinking prior to and during group rides.

Do not serve alcohol when friends will be riding.

Personal Level

When planning personal get-togethers (e.g., hosting parties) consider the likelihood that those attending may drink and ride.

Do not encourage riders to drink, either verbally or by providing easy access to large amounts of alcohol.

End access to alcohol well before people leave.

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Provide alternatives to drinking... activities, food, nonalcoholic beverages.

When alcohol is available to riders, having food and nonalcoholic beverages available helps to prevent overconsumption of alcohol for several reasons:

(1) People who are hungry or thirsty who only have alcohol available to them may drink more than they normally would in an attempt to satisfy hunger or thirst.

(2) Having food or nonalcoholic drink in one's stomach helps slow the release of alcohol into the system so that drinkers are not hit by the effects of alcohol all at once.

(3) Eating and drinking nonalcoholic beverages gives drinkers another activity – something to do besides drinking.

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Recognize Impairment – Observe  
Drinking

Keep an eye on how much  
alcohol others consume

Whether riders are hosts of private parties, organizers of group gatherings, or just happen to be someplace where riders are drinking, they can keep an eye on alcohol consumption and possibly prevent others from riding impaired.

Counting drinks consumed over time is a good way to understand how impaired riders are likely to be. It's not necessary to count every drink that every rider has. It is helpful to focus on those who seem to be drinking quickly, those who appear affected by alcohol, or those who habitually drink a lot.

It is also possible to get a general sense of group drinking by monitoring the alcohol supply (e.g., if five people have nearly finished a case of beer in two hours it is likely that they are impaired).

Even if the average number of beers per drinker seems low, it's possible that one or two drinkers have had significantly more than others.

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Recognize Impairment – Signs of Impairment

Learn and recognize the signs of impairment...

While drinking...

Fewer inhibitions

Unusually relaxed posture

Deliberate speech

While riding...

Drifting on a curve

Uncontrolled weaving

Trouble with balance at a stop

Research has shown that drinkers show certain behaviors related to drinking before they become “visibly intoxicated.” Observing these signs can provide clues that riders are at early levels of impairment.

For more information on signs of impairment, see “Your BAC Guide,” on page 19.

Research has also shown that there are cues of impairment that can be observed in the way a rider is riding.

Excellent Predictors

Drifting during a turn or curve

Trouble with dismount

Trouble with balance at a stop

Turning problems (e.g., unsteady sudden corrections, late braking, improper lean angle)

Inattentive to surroundings

Inappropriate or unusual behavior (e.g., carrying or dropping object, urinating at roadside, disorderly conduct, etc.)

Weaving

Good Predictors

Erratic movement while going straight

Operating without lights at night

Recklessness

Following too closely

Evasion

Wrong way

Discouraging Impaired Riding

Get help!! Several voices are more effective than one

Discouraging Impaired Riding

Don't know the rider?

Talk to their friends...

Talk to the bartender or party host



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### Discouraging Impaired Riding

As part of their toolkits, riders should be prepared with arguments for *not* riding impaired.

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### Safety Reasons

A car is more forgiving than a motorcycle.

The rider may feel he or she can ride safely, but people who have been drinking almost always think they're safe. The reality is that those around the rider have a more accurate perspective.

Drinking makes riders *more* susceptible to injury; not less

Despite what some people believe, people with alcohol in their systems are *more* likely, *not* less likely, to be injured in a crash. (Waller et al., 1986)

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### Legal Reasons

Police are out there looking for drinking drivers/riders.

The rider may think he or she is "legal" to ride but:

(1) any amount of alcohol can be unsafe.

(2) any amount of alcohol can be illegal.

If riders are over the legal limit and stopped they will automatically lose their license (currently true in 80% of States).

Costs of drinking and riding can exceed \$10,000 in fines and fees.

The instructor should discuss certain laws and be prepared to let students know what the laws are in their State. The laws might include, for example, licensing requirements, BAC levels, consequences for riding while impaired, possibly also training requirements, helmet requirements, etc. This type of information is found easily on the Internet. Instructors should consider printing this information and keeping it with their instructor guide.

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### Protecting the motorcycle

If the rider is arrested, the bike will probably be either towed or left wherever it is when the traffic stop occurs.

Riders often choose to ride after drinking rather than leave their motorcycle behind where it might be stolen or damaged. Impaired riders should consider the consequences for their motorcycles if they are arrested.

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<p>Even minor incidents are to be avoided.</p>	<p>With all the time and money riders have invested in their bikes, they really don't want to risk riding impaired – merely dropping the bike in a parking lot could cause costly damage.</p>
<p>Dependence of family (friends) on the rider...drinking riders are not just hurting themselves!</p>	<p>Most people have friends and family who would be affected by crashes and DWIs. These effects can include profound negative financial impacts on the family in the form of medical bills, legal bills, and lost wages. They also include emotional effects.</p>
<p>Riders may <u>survive</u> the crash but suffer long-term injuries... unable to walk, talk, or feed themselves.</p>	<p>Many people tend to think of motorcycle crashes as resulting either in minor, road-rash-type of injuries or death. People tend not to consider the likelihood of serious long-term or even permanent injuries.</p>
<p>Discouraging Impaired Riding          Provide alternatives to riding          Have a place for riders to stay.</p>	<p>For gatherings at a private house, consider what extra sleeping arrangements can be planned ahead of time. For gatherings away from home, be aware of local alternatives (e.g., hotels) for an overnight stay. Have transportation available to take impaired riders there.</p>
<p>Arrange secure storage for motorcycles</p>	<p>When riders drink more than they had planned they will often ride impaired to avoid leaving the motorcycle in an unsecured location. Where possible, make plans ahead of time to arrange for secure storage facilities so that anyone who <i>should</i> leave the bike <i>can</i> leave the bike without worry.</p>
<p>Arrange alternative transportation for rider and motorcycle (e.g., trailer or truck).</p>	<p>Alternative transportation could include trucks or trailers that are along for a group ride being brought to a central location where riders may be drinking or someplace reasonably close by where they can be called for if needed.</p>

Preventing impaired riding – When riders drink, there are still steps that can be taken to prevent them from riding.

Take keys and don't return them to impaired riders.

Stall for time.

Arrange to have police standing by to discourage leaving.

*NOTE:* Avoid attempts to disable the motorcycle.

Food and nonalcoholic beverages won't make someone sober, but they buy time and time *will* help make someone sober.

The Motorcycle Safety Foundation suggests that attempting to disable the motorcycle could do more harm than good “since an ineffective disabling may leave the motorcycle operable and unsafe.”

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## PROMISING TO HELP - 5 MINUTES

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What will you do to stop your wife, husband, boyfriend, girlfriend, brother, sister, son, or daughter from

How about someone you don't know well? Or have just met?

This section should be discussed with the group as a whole, rather than in breakout sessions.

Have students discuss the lengths to which they will be willing to go to intervene in the drinking and riding of each type of rider.

Acknowledge that there may be a limit to what they will be willing or able to do and that the limit will be different depending on factors, such as how well they know the drinking rider.

The main point is that students have an increased willingness to intervene unless they already had a high willingness to begin with.

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### **Taking the Pledge**

Hand out cards containing intervention steps, signs of impairment, and reasons not to ride impaired. Have students sign cards and place them in their wallets.

See Handout Card Contents on Page 24.

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# ROLE PLAYING EXERCISES

Introduce the role playing exercises. Explain that students will act out a series of situations in which intervention is needed to prevent a drinking and riding situation. Explain that the role playing exercises are intended to give students practice putting *Riders Helping Riders* concepts into practice. They also serve to show how well students have learned the concepts of this program.

As many students as possible should participate. If there is sufficient time for students to participate in more than one scenario, they should alternate between being the intervener and being the subject of the intervention. Each exercise should last from three to five minutes. Avoid terminating an exercise before the intervener has had a chance to use all possible options, but avoid letting the exercise drag on beyond the point that anything constructive is taking place. Scenes can be temporarily halted to provide guidance if it's clear that a student does not understand what to do, is unwilling to attempt an intervention, or is not taking the role play seriously.

Each of the exercises is designed to be performed by two players. Names of characters are given to simplify describing the scene -- all characters can be played by students of either gender. Students who are intervening in drinking and riding should use the concepts that they've learned in class. Students who are the subjects of the intervention should put up a reasonable, realistic amount of resistance to provide a challenge for the person intervening. The players should act as realistically as possible. Drinking riders should act neither more, nor less impaired than the scenario calls for. Those intervening should do as much as they reasonably can to intervene but not more than they think they would in real life. Encourage students to take the role playing exercises seriously.

At the end of each scene, the class will critique the intervention attempt. Critiques should be based on how well the intervener handled the situation, how realistic the role playing was, and what alternative techniques or arguments might have been used.

## Scenario 1. At the Park

A group of friends has ridden to a State park for a cookout. The State park is about an hour away from town. One person brought a pickup truck full of supplies, including a cooler full of beer. Tony has watched Jill drink three beers in the hour they've been there. Jill is on her way to the cooler to get another beer. Tony thinks it would be a good idea to

## Scenario 2. After the Game

Joe is getting ready to ride home after watching a football game at Steve's house. Joe has been drinking at Steve's house for about three hours. He drank a six-pack of beer in that time. Joe has seen a chart that shows that he would be legally impaired with four drinks in his system and has heard that the body burns about a drink an hour. Joe has done the

Steve has been keeping an eye on Joe. He's seen some signs that Joe is feeling the effects of drinking. Joe is cursing more than usual and starting to act a little rude, which isn't like

## Scenario 3. At the Rally

Alice is at a rally, waiting in line at a stand that serves food and beer. George and another rider are standing in front of her in line, talking. It is obvious that they are friends. The other rider appears to have had a lot to drink. The other rider buys a beer and leaves. Alice approaches George to find out if he knows the other rider, to find out if the other rider is planning on riding anytime soon, and to suggest that he shouldn't be riding and should probably stop drinking. Begin the role playing at the point just after the other rider has left

## Scenario 4. In the Parking Lot

Jack is pulling into a parking lot at a local bar just as Hal is getting ready to leave. Hal's been drinking for a while and it's pretty obvious. Hal loses his balance for a second while backing out of the space and falls over, dropping the motorcycle. Jack thinks someone should talk Hal out of riding and it looks like he's the only one around to do it. The scene should start after Hal has picked up the motorcycle.

# YOUR BAC GUIDE

You may have heard the term BAC. It refers to blood alcohol concentration, or how much alcohol is in the bloodstream. Police give breath tests to measure BAC to tell if a driver is impaired.

If you had a breath tester when you were watching people drink, you could measure BAC and tell whether other riders were too drunk to drive. Even better, you could tell if they were “on the way” to getting drunk and keep them from getting there.

You may not be able to give a breath test, but you can still check a guest’s BAC:

B - Behavior - How They Act.

A - Appearance - How They Look.

C - Coordination - How They Move.

This booklet gives you the ABC’s of BAC. It will help you tell when people are beginning to become impaired by alcohol. That way, even if they don’t know what kind of shape they’re in, you will.

## A. Slight Impairment

Any amount of alcohol can affect people. Most people become more relaxed, outgoing, and generally enjoy themselves more. That is one of the main reasons people drink.

At this level, the riding ability of most people will probably be slightly affected. After one or two drinks they may get a little clumsy or their judgment may become questionable.

## B. Moderate Impairment

People who are moderately impaired aren’t necessarily drunk, but they are definitely on the way. They will show it in their behavior, appearance, and coordination. They will show it in their riding, too. If this happens, they can be arrested even if their BAC is below the legal limit. At this level, they are more likely to make mistakes that could result in a crash.

If you see even one of the following signs the chances are very good that you are looking at someone who is well on the way to getting drunk. This is the time to start taking precautions to see that this drinker does not continue drinking and become severely impaired.

### Behavior

How do they act — toward you and others. Look for the following signs:

Loudness — Loud or somewhat domineering conversation.

Closeness — Talking right into someone’s face.

Expansiveness — Exaggerated gestures, letting the hands and arms do the talking.

Suggestiveness — Suggestive language, mild profanity.

Physical Contact — Hugging, touching, or caressing. Touching, poking, or thumping people while talking to them.

Rudeness — Lack of inhibition, rudeness, doing things that don't quite fit the company or the occasion.

Withdrawal — Not speaking to others, going into another room alone.

Of course, for every one of these acts, there is somebody who does it without ever having touched a drop. That's why it helps to see how people behave before they start drinking.

### Appearance

When people are moderately impaired they often have a certain look about them.

Warm — Sweating, rosy face, may loosen clothing (tie off, sleeves rolled up, shoes off)

Red eyed — Eyes look red, bloodshot, or tired (heavy eyelids).

Rumpled — Clothes askew, hair mussed.

Silly — They may have a cute, silly, or self-satisfied glow about them.

Reclining — Unusually relaxed posture, spreading out in chair.

### Coordination

People who are moderately impaired may begin to have trouble coordinating the movement of their hands, arms, body, or mouth. They start to have trouble with:

Poor dexterity — Begin to have trouble writing clearly or undoing buttons, picking up change off the table.

Slouching — They may slouch or tend to lean on things when they are talking.

Deliberate speech — They have to make a real effort to speak clearly.

### By the Numbers

Any one of these signs may point to somebody who is moderately impaired. But, if you count six or more of these signs in the same person, they are likely more than moderately impaired— they may be...

## C. Severe Impairment

This means drunk. Anyone who drives when they are at this level is breaking the law and is certainly in no shape to ride a motorcycle.

A real falling-down drunk is obvious to anyone. But, signs of severe impairment can be hard to spot in the early stages. There are those people who can be very drunk without showing it. Here are the signs of severe impairment you are most likely to see. One of these signs means the person is very likely drunk. Many of the signs are the same as those shown when people are moderately impaired, but to a greater extent.

## Behavior

**Social Disregard** — Letting go, being completely uninhibited (e.g., dancing without a partner, looking through cabinets, making sexual advances, urinating outdoors).

**Hostility** — Becoming rude or hostile. Pushing, cursing, shouting.

**Profanity** — Lewd, strong profanity.

**Confusion** — Forgetful, completely addled. They forget what they have been talking about, what someone else just said, or the fact that they just lit up a cigarette when they had another one burning.

## Appearance

**Sloppy** — Clothing rumpled or askew, hair mussed.

## Coordination

**Fumbling** — Shaky hands, fumbling with objects (e.g. pencils, cigarettes, lighters); writing becomes a scrawl.

**Stumbling** — Stumbling, using hands as outriggers to keep from falling; bumping into people.

**Poor perception** — Misjudging distance or depths. Setting a drink down hard on the table or on the edge of the table. Missing the ashtray, toilet, or other targets.

**Slurred Speech** — Speech is slurred and even incoherent.



D. Summary

**MODERATELY IMPAIRED**

Behavior

Loudness  
Closeness  
Expansiveness  
Suggestiveness  
Physical contact  
Rudeness  
Withdrawal

Appearance

Warm  
Red eyed  
Rumpled  
Silly (smug)  
Reclining

Coordination

Poor dexterity  
Slouching  
Deliberate speech

**SEVERELY IMPAIRED**

Behavior

Social disregard  
Hostility  
Profanity  
Confusion

Appearance

Sloppy

Coordination

Fumbling  
Stumbling  
Poor perception  
Slurred speech

This guide to recognizing signs of impairment has been adapted from “Host and Server Determination of Alcohol Intoxication Level” by A. James McKnight and Paul R. Marques, National Public Services Research Institute, June 1990.

# HANDOUT CARD CONTENTS

## Page 1: Riders Helping Riders

Keys to preventing drinking riding crashes:

Separate the drinking from the riding

Find alternatives to drinking and riding

Recognize impairment

Discourage impaired riding

Prevent impaired riding

## Page 2: Signs of moderate impairment:

Speaking louder than normal

Standing closer than normal

Gesturing more

Suggestive language

More physical contact

Rude behavior

Withdrawing

Sweaty, red-faced, loosening clothing

Red eyes

Rumpled appearance

A silly look on their face

Laying down or leaning against walls

Poor dexterity

Slouching

Deliberate speech

## Page 3: Reasons Not to Ride Impaired:

“You have people who depend on you.”

“Do you really want to take a chance on messing up your bike?”

“The police are out looking for drinking drivers. Got \$10,000 to pay your fines & fees?”

“If you get stopped they’re either going to tow your bike or leave it where it can be stolen.”

“You don’t need to be ‘over the limit’ to be arrested.”

“People who’ve been drinking always think they’re OK to ride, even though they’re not.”

## Page 4: Pledge

“I pledge to do my best to help a drinking rider live to ride another day.”

Name \_\_\_\_\_

Date: \_\_\_\_\_

## REFERENCES

Waller, P.F., Stewart, J.R., Hansen, A.R., Stutts, J.C., Popkin, C.L., & Rodgman, E.A. (1986). The potentiating effects of alcohol on driver injury. *JAMA*, *256*, 1461-1466.

**Abstract:** It is well-established that alcohol (ethanol) is associated with increased probability of traumatic injury. This relationship has been attributed to alcohol's impairment of judgment and psychomotor performance, leading to increased probability of an injury-producing mishap. Once an accident occurs, it is widely believed that alcohol may protect against injury. However, controlled laboratory studies using animal models indicate that alcohol exacerbates the injurious effects of trauma. In this study, detailed analysis of data from more than 1 million drivers involved in motor vehicle crashes indicates that when the effects of injury-related variables such as seat belt use, vehicle deformation, vehicle speed, driver age, and vehicle weight are taken into account, the drinking driver is more likely to suffer serious injury or death compared with the non-drinking driver. These findings do not support the widespread belief that alcohol is protective against injury, but rather indicate that alcohol increases vulnerability to injury in any given crash.

Grant, S.A., Millar, K., & Kenny, G.N.C. (2000). Blood alcohol concentration and psychomotor effects. *British Journal of Anaesthesia*, *85*(3), 401-406.

**Abstract:** This study assessed the effect of intravenous alcohol infusions on psychomotor impairment and compared it with that of alcohol administered orally. Comparisons were made between three European drink-driving limits of blood alcohol concentration (BAC) (20, 50, and 80 mg 100 ml<sup>-1</sup>) and an oral dose of alcohol 0.75 mg kg<sup>-1</sup>. Twelve volunteers, ages 22-34, were recruited. At targets of 20, 50, and 80 mg 100 ml<sup>-1</sup>, the mean (SD) BAC was 22.1 (3.7), 51.5 (3.3), and 80.5 (4.2) mg 100 ml<sup>-1</sup>, respectively. The peak BAC following an oral dose of alcohol 0.75 mg kg<sup>-1</sup> ranged from 19 to 68 mg 100 ml<sup>-1</sup>. In psychomotor testing, choice reaction time deteriorated with increasing BAC and showed significant differences between baseline and the 50 (P < 0.05) and 80 mg 100 ml<sup>-1</sup> (P < 0.01) conditions. Dual-task secondary reaction time deteriorated with increasing BAC and showed a statistically significant difference between all groups and baseline (oral and 20 mg groups, P < 0.05; 50 and 80 mg groups, P < 0.01). Dual-task tracking in the 50 and 80 mg groups was significantly different from baseline (P < 0.05 and P < 0.01, respectively). Oral dosing resulted in widely variable BACs, making it difficult to assess psychomotor impairment reliably. An intravenous infusion enables the BAC to be maintained within a narrow range. This allows precision when investigating the effects of alcohol on psychomotor performance.

Liguori, A., D'Agostino, R.B., & Dworkin, S.I. (1999). Alcohol effects on mood, equilibrium, and simulated driving. *Alcoholism: Clinical and Experimental Research*, *23*(5), 815-821.

**Abstract:** The effects of alcohol on simple versus complex psychomotor performance were compared in 18 adults. **METHODS:** Subjects received ethanol doses of 0.0, 0.5, and 0.8 g/kg in a randomized, double-blind, within-subject design. Forty minutes after finishing their drinking, the subjects completed a 60-min battery of tests that included: 1) a sensory organization posturography test (EquiTest); 2) latency to apply the brake after appearance of a barrier in a driving simulator (brake reaction time); 3) visual analog subjective-effects scales (VAS); 4) the Profile of Mood States (POMS); 5) critical flicker fusion (CFF); and 6) choice reaction time (CRT). **RESULTS:** Alcohol dose dependently reduced composite equilibrium scores and increased brake reaction time. On the CRT task, total reaction time was significantly increased after the high dose but not the low dose. Alcohol dose dependently increased VAS "dizzy," "high," and "drug effect" ratings. The POMS and CFF were not significantly affected by alcohol. **CONCLUSIONS:** These data suggest that an ethanol dose that neither influences certain mood states nor impairs simple psychomotor task performance nonetheless may impair equilibrium and complex psychomotor tasks (e.g., driving).



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