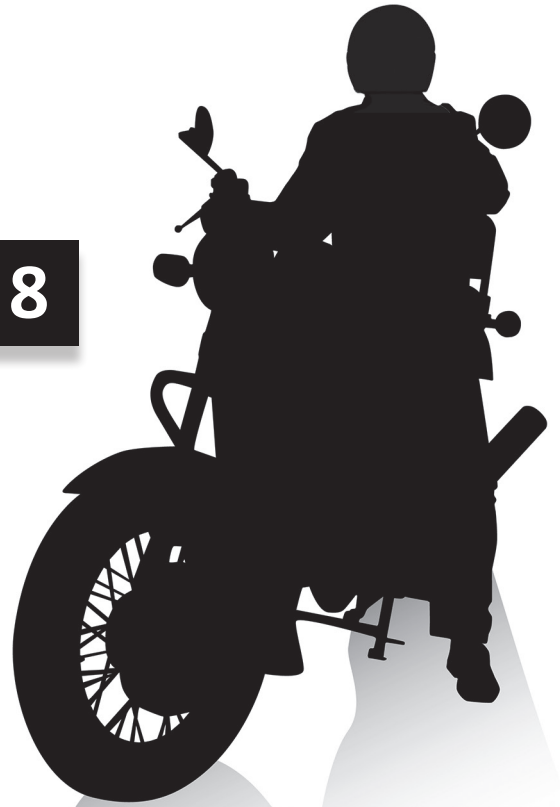


Motorcycle Mentorship Module 8

Risk Awareness





Warning: Incorrect or inaccurate information could lead to tragic results on the road. If a question arises that is not covered in the guide and you don't know the answer from your own experience and training, simply state, "That is a great question, I'll get back to you with the answer."

Your Service Safety Center will help with these types of questions should they arise. Their numbers are as follows:

US Army Driving Directorate: **334.255.3039**

USMC Safety Division: **703.604.4459**

US Navy Shore Safety: **757.444.3520 x7165**

US Air Force Safety Center: **505.846.0728**

USCG Safety Division: **202.475.5206**



Preface

About: The Defense Safety Oversight Council (DSOC) Motorcycle Mentorship Modules are a set of thirty six (36) facilitation modules designed for the purpose of increasing rider knowledge on various aspects of riding and providing additional capability for self-policing within peer groups. The modules are intended as a mechanism to further decrease motorcycle related mishaps and fatalities within Department of Defense (DoD) by encouraging riders to talk, live, and think about the topic.

Using the Module: The module content enclosed is intended as a facilitation guide to assist you with discussing the topic. However, it is still critical to use your skills and talent to engage participants and develop “buy-in” on this subject from your group. To maximize this, motivate and moderate your participants, control the accuracy of participant feedback, and be mindful of their time.

Page	Section
2	Facilitation Guide – A brief overview on conducting a facilitated discussion of a topic
3	Module Overview – This section provides the facilitator a synopsis of the topic, learning objectives, and the suggested environment, props, and handouts for conducting the module
4	Module Discussion Introduction – This section provides guidance to the facilitator in opening up the discussion and getting participants talking about the topic and their relevant experiences
4	Discussion Areas – This section provides various discussion topics, sample facilitation questions, and factual information for the facilitator to lead the discussion
8	Wrap-Up – This section provides guidance to the facilitator on wrapping up the topic discussion
9	Feedback Form – A feedback form to be given to all participants for their feedback on the module discussion
10	Resources – Additional resources and definitions to assist the facilitator in preparing for and conducting the topic facilitation
11	Handouts – Figures, pictures, diagrams, etc. to assist the facilitator to better demonstrate a topic idea

Facilitation Guide for DSOC Mentorship Modules

It is recommended that this Mentorship Module be conducted in a facilitation style. Using the information provided in this Mentorship Module, you, as the facilitator, will lead a discussion on the subject. *You should not be conducting a lecture!* The facilitator's role is to help with how the discussion is proceeding. Participants will have much more "buy in" and connectivity with the information if they have input. One of your roles as the facilitator is to control the accuracy of the input and control the time. From the Mentorship Module, generate questions which will lead to group discussion. The more you let the group participate, the more success you will have.

Competencies of a Facilitator:

- Prepare prior to the event
- Make sure everyone gets a chance to participate and help members to express themselves
- Ask rather than tell
- Honor the group, display respect for the members, and acknowledge participant contributions
- Ask for others' opinions
- Listen without interrupting
- Demonstrate professionalism and integrity

The key characteristic distinguishing facilitation from other types of leadership, like scripted training, is that the outcomes are never predetermined in a facilitative setting. Although the background information provided with this Module remains the same, the result will depend on the participants, the knowledge and experience they bring, and the information that they feel they need to take away. The group uses the activities provided by the facilitator to unlock expertise, ensure thorough discussion, stay focused and reach decisions that are better than those any individual could come up with alone.

At the beginning of each Mentorship Event, discuss why the participants are there and what they will receive as a result of participating. Adults have limited time and they want to know "What's in it for me?" A facilitator should make training fun. Encourage humor and laughter in your Mentorship Event.

Principles of Adult Learning:

- Adult Learners want material that is relevant to them. "What's in it for me?" "What will I get out of this that will make a difference to me?"
- Adult Learners come to training events with varying amounts of experience. They like to share their experiences. If you have minimal or no motorcycle experience, you can still draw from your group.
- Even if you have motorcycle experience, you should draw from your group because people tend to remember what "they" said longer than what you said. Information that they "own" is more valuable to them.
- Facilitators are not always subject matter experts; nor do they need to be. Facilitators may draw on the existing knowledge of the participants and the information provided in these Modules.

Section I: Module Overview

Time Frame: One 30-60 minute facilitator-led discussion

Level of Prior Knowledge: Participants should be able to identify risk associated with operating a motorcycle and identify strategies and skills to deal with that risk.

Synopsis: The keys to safe motorcycle operation are to identify all potential hazards early so that actions can be initiated to limit the number risk factors at any given time. This is primarily a mental task—riding a motorcycle safely is primarily a skill of the eyes and mind.

Learning Objectives:

→ Risk Identification

- Common risk factors shared by group
- Rider induced risk – (i.e. distraction, over-confidence, lack of skill practice/development)
Identify how factors listed impact risk and riding.
- Other road user risk – (i.e. drivers, pedestrians, bicyclist, animals)
- Environmental risk – (i.e. weather, road conditions, traffic control signs/signal/paint)

→ Risk Prioritization

- Determining the “Ouch” factor

→ Risk Acceptance

- Rider responsibility for any hazardous situation

→ Risk Avoidance – Mental skills

- Scan Strategies

→ Risk Avoidance – Physical skills

- Braking/Swerving time and distance

Suggested Environment/Props/Handouts:

Handout 1: Braking in a Straight Line – Levels of Performance

- The handout provided was developed by the Motorcycle Safety Foundation and is utilized in the Military Sport bike Rider Course to give riders an evaluation tool for self-practice after the course. The ability to stop quickly is a factor in motorcycle vs. automobile crashes. This is a primary hazard avoidance skill when the mental strategies needed to identify risk are weak.

Section II: Module Discussion

Introduction: Facilitate discussion: “When we talk about risk and motorcycles, what comes to mind?”

(Collect as many specific factors as possible and record ideas...brain storm until the white board/newsprint/etc. is full)

Topic: Risk factors in motorcycling originate from a seemingly endless list of issues: maturity, the rider’s risk behaviors during other activities, other road users, environmental considerations, roadway characteristics and motorcycle mechanical condition to name only a few. The key to successfully handling risk is to identify hazardous conditions/situations well in advance and take action to limit those conditions.

Open discussions with participant-focused activities and introductions. Activities should encourage participant interaction and develop camaraderie and peer-relatedness. Ask for and encourage participant sharing of experiences related to the module topic.

Suggested Discussion Areas:

Discussion Area 1: Risk Identification

Facilitation Questions – Refer to the comments and thoughts captured with the preceding opening question and discussion. “Let’s put these risk factors into groups and then maybe we can find some ways to deal with them effectively.”

(Have the participants divide the factors, previously identified, into three (3) categories: Rider induced risk, other road user risk, and environmental risk; environmental risk includes road characteristics, animals, insects, and weather)

1. Rider Induced Risk: Single motorcycle crashes account for a significant number of crashes. Rider judgment and behavior is the central issue in these incidents. Speeding too fast for conditions, alcohol and the lack of any skill improvement activities (rider training) are among the primary rider-contributed factors to a motorcycle crash.

2. Other Road User Risk: A common statement from automobile drivers after an auto vs. motorcycle crash is “I didn’t see the bike.” The motorcyclist must consider this “invisibility” and include this knowledge into his/her risk identification in other road users. While automobiles are the most easily identified road users, many other users may create risks for the rider. Pedestrians, bicyclists, trucks, buses, and animals are all part of the traffic mix and all can create significant undesirable events.

3. Environmental Risk: Mother Nature and roadway conditions (potholes and road repairs for instance) can be a constant source of risk to the rider and can greatly affect the stability of motorcycles.

Discussion Area 2: Risk Prioritization

Facilitation Questions – Refer to the comments and thoughts captured with the opening question and discussion. “Let’s take a few minutes and consider the level of risk, danger or “Ouch factor” each of these things we’ve listed brings to our riding, and more importantly, our strategy or plan. You do ride with a plan, right?”

(Let the participants rank the risk of each factor. Look for any trends in the group’s rankings. Often groups will place the other road users among the highest risks. It is important to have the group realize that the road itself, particularly curves, is often a major factor in motorcycle crashes.)

Ask: Do you experience these factors often?

(If participants experience these risks or near misses often, ask “Why do you think these things happen so often to you?”)

When you you experience these risk factors, how many do you deal with at once?

So how do these rankings you’ve identified fit into your survival plan/strategy?

(The facilitator may realize that riders “blame” car drivers for the risk associated with riding. Keep these riders in mind as you discuss the final items in this module)

Discussion Area 3: Risk Acceptance

Refer to the personal experiences that were shared earlier, directing the discussion toward how the rider may have been responsible for some of the risk. This may take some leading questions and can be met with some denial. Make your point but use caution and avoid “shutting down” participants.

(Using the groups, have each group identify 5 factors they dealt with on their last ride. Take 10 of the “last ride” factors and, with the help of all participants, create a common riding scenario that everyone can identify with. Ask participants to point out hazards and the potential for a crash.)

Facilitation Questions – How could failing to identify crash causing factors affect your life?

(Have the participants reflect a few minutes on how a serious crash that leaves the rider with permanent injuries [loss of mobility, loss of limb] or loss of life will change the rider’s and their family’s life. Discuss the crash consequences. It is important to have participants personalize this.)

Facilitation Questions – Given these life changing effects, why take unnecessary (*with emphasis on unnecessary*) risk at all?

Summary statement: “Riding itself is rewarding and dangerous enough when done well. Why push it further?”

Discussion Area 4a: Risk Avoidance – Mental

Facilitation Statement – “So we’ve decided to accept the risk. Let’s talk about the ways we can possibly reduce our risk.”

A lot of time and thought has been put into helping drivers and riders effectively process the things we see as we ride or drive. Before I share a few ways that are or have been taught in the U.S., let’s take a minute to find out how you process information from the world your passing through.

(Ask the participants to share what they look for, then ask is there a priority. Next ask if they use a scan strategy. Record answers for reference)

For many years, Driver education classes have used the Smith System’s 5 steps. They are:

1. Aim High in Steering

- Look 15 seconds into your future. (Don’t just look at the vehicle in front of you)

2. Get the Big Picture

- Look for Hazards. (Other Motorists, Pedestrians, Vehicle doors opening)

3. Keep Your Eyes Moving

- Don’t stare. (Use your peripheral vision; stop the fixed habit stare)

4. Leave Yourself an Out

- Monitor the space cushion around you and your bike.

5. Make sure They See You

- Use your signals- (Turn, 4-Way Flashers, Head Lights, Brake Lights, Horn, Hand Signals)
- Make eye contact

For years MSF used a system known as SIPDE: Scan, Identify, Predict, Decide and Execute.

Currently MSF uses a modified process called SEE: Search, Evaluate and Execute.

Let’s look at this last one. *(As you discuss SEE try to tie in the participants earlier comments).*

When searching for possible hazards it is important to look well ahead. MSF suggest at least 12 seconds ahead. As we search it may help if we look for potential hazards by category. Consider: 1) Traffic Control devices, 2) Roadway characteristics, design, and surface and 3) Other road users. How could searching like this improve your riding?

Once we’ve identified items, we start evaluating how they could affect us.

Is that car going to turn left in front of me or does he see me (always assume he/she doesn’t)? What can I do to make sure the driver sees me? Is that shadow ahead just a shadow or is that a pothole in there?

Now that we’ve evaluated the situation and decided which hazards are the most dangerous and how to deal with them, we have to execute those decisions. If we Search and Evaluate well, there are 3 things we can do: Adjust speed (slow or increase speed), Adjust position (change lanes or safety margin) and Communicate (lights, signals and horn).

If we haven’t planned so well our options can be fewer and much more critical. Let’s see how we can prepare for those times when we let our guard down.

Discussion Area 4b: Risk Avoidance – Physical

Facilitation Question – “When bad things happen, we have two primary hazard avoidance maneuvers we can use. What are they?” (Swerving and Quick stop)

A trained rider, who practices and improves his/her skill, can usually swerve around a hazard more quickly than they can stop to avoid it. A swerve is really just two counter steers to get around an obstacle quickly and with a minimum of effort. A good way to practice, besides regular training courses, is to use a firm counter steering whenever you change lanes and use an equally firm counter steer to straighten back up. Ask if everybody is familiar with counter steering (counter steering is the most effective way to steer a motorcycle and is done by pressing the handgrip in the direction you want to go; press right, go right, press left, go left).

Stopping quickly at road speeds in traffic can be pretty scary the first time a rider does it. Hopefully that rider’s first time was during a practice session and not when his/her life depended on it.

It’s important to remember that effective braking is with both brakes and that emergency braking is with both brakes and ideally they are applied smoothly and progressively up to the threshold of losing traction. Just before the tire skids is the maximum use of the brakes you can achieve. Practice by finding an abandon parking area and practice until the muscle motor skill for maximum braking is automatic and then continue to practice often as these skills quickly diminish. When changing bikes it is good idea to practice more often until motor skills are automatic for the new bike.

Facilitation Question – How do we gain the confidence to use the brakes like that? (Training and Practice, Practice, Practice.)

Wrap-Up:

Brief or discuss the following statement:

Risk Management is about “*Seeing the danger before it becomes dangerous and making a plan to deal with it.*”

Suggested Wrap-Up Discussion: Please share with the group what you’ve picked up in the discussion today. Let’s have you and your group come up with a summary for this session.”

(Give the groups time to create a summary and then have them share them.)

Distribute copies of the DSOC Motorcycle Mentorship Module Evaluation form to all participants and request that they deliver or mail the completed form to the Command or Command Safety Office for processing.

Remind everyone to ride safe, and see you at the next Mentorship Meeting.

DSOC Motorcycle Mentorship Feedback Form

Presenter Name:

Date:

Topic/Title:

Unit Number:

Please review each statement below and check the response that closely matches your experience in the Mentorship Module today:

1. Please rate the presenter's performance:

Prepared
 Not Prepared
 Engaging
 Not Engaging
 Led Discussion
 Lectured

Comments:

2. I was given opportunities to participate in the module's discussion

Never
 Only Once
 2-4 Times
 Many Times Throughout Discussion

Comments:

3. With regard to my personal riding experiences, this discussion was:

Relevant
 Not Relevant
 Interesting
 Not Interesting

Comments:

4. This discussion topic has provided me with specific learning points that I can use to be a safer, better informed rider

None
 One Idea or Fact
 2-4 Learning Points
 5 or More

Comments:

5. I would be interested in participating in other Motorcycle Mentorship Module discussion topics

Never Again
 Willing to Try Another Module
 Would Like to Do Modules Regularly

Comments:

Thank you for your participation. Please make note of any other suggestions or comments below (continue on the back if needed):

Deliver or mail this completed form to the Command or Command Safety Office for processing. Please do not return this form directly to the Module Presenter.

Resources

Continued Reading:

MSF Advanced RC Sportbike Tech Coach Guide,
from the ARC-ST CD

Motorcycle Safety Foundation

www.msf-usa.org

Definitions: *(As defined for purposes of this module.)*

ARC: Advanced RideCourse

BRC: Basic RiderCourse

Crash: An interaction of factors that accumulate, resulting in a collision

Cruiser: A motorcycle style usually with the riders feet forward and hands up, the back slightly reclined

ERC/BRC2: Experienced RiderCourse/Basic RiderCourse 2

MSRC: Military Sportbike Rider Course

Standard: A motorcycle style with the riders feet underneath or slightly rearward, hands reaching slightly towards the handlebars, back straight.

Sportbike: A motorcycle style with the riders feet high and rearward, hands reaching forward for the short handlebars, body leaning forward.



Handout 1: Braking in a Straight Line – Levels of Performance

Unsatisfactory: Performance at this level represents extremely weak braking ability with average rate of deceleration at or below 0.45g (force of gravity). Trained novice riders typically brake at levels higher than this. Performance at this level may result from the use of the rear brake only. Riders likely have little or no understanding of motorcycle braking principles and/or may even believe false principles. Riders who perform at this level are at serious risk of crashing when emergency braking is an appropriate avoidance response. They tend to significantly under brake or over brake (especially on the rear) and skid.

Basic: Performance at this level represents beginning rider ability with an average rate of deceleration in the range of 0.46g to 0.65g. Trained novice riders are expected to perform at the upper end of this range. At the lower end, performance may result from appropriate use of the rear brake with very slight application of the front brake. Riders typically have a basic understanding of proper motorcycle braking principles but their performance may show considerable variation indicating the need for regular practice. At the upper end of the range, typical performance results from appropriate use of both brakes but significantly less than maximum use of the front brake.

Proficient: Performance at this level typically represents the ability of a rider who fully understands motorcycle braking principles and regularly practices emergency braking resulting in average rates of deceleration in the range of 0.66g to 0.80g. Riders who perform in this range demonstrate confidence and control in their braking ability. They are able to consistently perform stops at this level with occasional performance at the distinguished level.

Distinguished: Performance at this level typically represents a rider who has invested significant time in gaining full knowledge of motorcycle braking principles and has worked diligently in applying those principles through regular practice. At the distinguished level, braking performance regularly exceeds an average rate of deceleration above 0.81g. Riders who regularly perform at this level have often participated in motorcycle rider training providing instruction beyond the basics.

Braking Distances – Levels of Performance

MPH	UNSATISFACTORY	BASIC	PROFICIENT	DISTINGUISHED
15	17 feet or greater	12-16 feet	9-11 feet	less than 9 feet
20	30 feet or greater	21-29 feet	17-20 feet	less than 17 feet
25	46 feet or greater	32-45 feet	26-31 feet	less than 26 feet
30	67 feet or greater	46-66 feet	38-45 feet	less than 38 feet
35	91 feet or greater	63-90 feet	51-62 feet	less than 51 feet
40	119 feet or greater	82-118 feet	67-81 feet	less than 67 feet

Source: Motorcycle Safety Foundation



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Some of the principal contributors to this effort include the following:

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