#### Virginia Highway Safety Summit May 2022

#### **MOTORCYCLE SAFETY FOUNDATION**

















# **Session Goals**

- 1. Overview
- 2. Historical Perspective
- 3. Developmental Underpinnings
- 4. Content of Basic RiderCourses
  - Level I Basic
  - Level II Behavioral
  - Riding Exercises

# **Session Goals**

#### 1. Overview

2. Historical Perspective

- 3. Developmental Underpinnings
- 4. Course Examples

#### 5. Content of Basic RiderCourses

- Level I Basic
- Level II Behavioral
- Riding Exercises

We want riders to...? Ride Like a Pro Ride Like a Champion Ride Like a Safety Geek Ride Like a Professional Safety Geek Champion

#### 1. Where should riders be?



# Knowledge

→

#### 2. Where are BRC graduates?



# Knowledge

#### 3. Where should BRC graduates be?



# Knowledge

#### 4. As a rider, where are you now?



# Knowledge

➔

#### 5. Where were you on your first street ride?



# Knowledge

# **Motorcyclist Safety**

# **Holistic Approaches**

# E's of Traffic Safety

Education Engineering Enforcement Emergency Services



#### Loss Reduction Model: Countermeasures

	Human Factors	Vehicle Role	Environment
Crash Prevention (Pre-Crash)	<ul> <li>Rider trainin</li> <li>Rider licensi</li> <li>Distractions</li> <li>Impaired rid</li> <li>Motorist awa</li> <li>State safety</li> </ul>	ng s	<ul> <li>Roadway design, construction, operations, and preservation</li> <li>Roadway maintenance</li> </ul>
Injury Mitigation (Crash)	Use of protect	tion	<ul> <li>Roadway design, construction, operations, and preservation</li> </ul>
Emergency Response (Post-Crash)		Automatic crash notification	<ul> <li>Education and assistance to EMS</li> <li>Bystander care</li> <li>Training for law enforcement</li> <li>Data collection and analysis</li> </ul>

#### Levels of Safety Countermeasures Training and Education Perspective

#### I = Engineering, Enforcement & Emergency Services

- Licensing
- Improved pavement lines
- Improved guardrails
- Enhanced warning signs
- Helmet use
- Personal protective gear use
- Yard signs
- Safety billboards
- Overhead sign safety messages
- Motorcycle anti-lock brakes
- Selective enforcement
- Crash response time

## II = Skill training (Skill = Safety)

- **III = Skill training with safety messages** (Training + Education)
- IV = Skill training with behavior-related selfassessment and reflection (Training + Deeper Education)

#### Traffic Safety "E's"

Enforcement Education Engineering Emergency Services

# **Riding Subtasks**









#### Driver/Rider Self-Check

Place a number from 1 (low) to 10 (high) in the space provided.

ltem	You
Driver/Rider Knowledge	
Driver/Rider Skill	
Perceptual Ability in Traffic	
Degree of Cooperation in Traffic	
Likelihood of Being in a Crash	
<b>Emotional Commitment To Safety</b>	

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# **MOTORCYCLE SAFETY FOUNDATION**

#### The Human Element: Fuel Dreams & Save Lives

# Mission

MSF is the country's leading safety resource and advocate for motorcyclists. We create world-class education and training systems for riders of every experience level. We raise public awareness of motorcycling to promote a safe riding environment.

# Vision

To help motorcycle riders realize their full

potential, elevating awareness of motorcycling

safety in order to save lives.

# Mission and Vision

#### It's about:

- 1. Non-riders sharing the road.
- 2. Non-riders considering riding as a quality of life decision.
- 3. <u>Riders</u> sharing the road.
- 4. <u>Riders</u> having access to MSF's courses.
- 5. <u>RiderCoaches, RiderCoach Trainers, Quality Assurance</u> <u>Specialists and Program Administrators</u> fulfilling their roles.
- 6. <u>Agencies and safety professionals</u> for collaboration.

# **MSF Website**

#### msf-usa.org



Basic *RiderCourse* (BRC: 2014)

• Behavioral aspects, self-assessment, perception

• Online component + interactive live classroom

• Online + range only

Basic RiderCourse (BRC: 2001)

Principles of Safety, Learning and Motor Skills Development

• Input from Invested and Divested Professionals

Sea

Change

• Experience, Research and Literature Review

Motorcycle RiderCourse: Riding and Street Skills (MRC:RSS 1986)

- Motorcycle Accident Cause Factors and
- Identification of Countermeasures (Hurt Report)
  - Motorcycle Rider Course Field Study

Motorcycle Rider Course (MRC: 1976)

- Updated Instructional Objectives
  - Photographic Analysis

**Beginning Rider Course (BRC: 1974)** 

Motorcycle Task Analysis

# **MSF's Learn-to-Ride Course**

# **Riders Gaining Control**



# **Rider Stress**



# Training Incident Severity



# **Teaching Satisfaction**



# Prepared to Ride On-Street



# THEN ON NOW

#### 2-Course Approach

Basic CourseAdvanced Course

#### Systems Approach

- Lifelong Learning
- Multiple Entry Points
- Safety Renewal
- Multiple courses and training opportunities



#### **MSF Rider Education Training System**



# **Rider Skills Lab**

#### Menu of 23 Exercises from 5 MSF *RiderCourses* (Skill-Building Practice Exercises)

- Basic *RiderCourse* (BRC)
- Basic RiderCourse 2 (BRC2)
- Advanced *RiderCourse* (ARC)
- Basic Bike Bonding *RiderCourse* (BBBRC)
- Ultimate Bike Bonding *RiderCourse* (UBBRC)
- Circuit *RiderCourse* (CRC)

#### **Rider Skills Lab**

Basic *RiderCourse* (BRC)

RSL 1 ... BRC 3 – Starting and Stopping Drill (as a qualifier, if needed)

RSL 2 ... BRC 4 – Shifting and Stopping

RSL 3 ... BRC 5 – Basic Skill Practice

RSL 4 ... BRC 9 – Limited-Space Maneuvers

Basic *RiderCourse* 2 (BRC2)

RSL 5 ... BRC2 1 – Control at Low Speed

RSL 6 ... BRC2 2 – Stopping More Quickly (and Tight Turns from a Stop)

RSL 7 ... BRC2 6.1 – Low-Speed Decreasing Radius Curve

Basic Bike-Bonding *RiderCourse* (BBBRC)

RSL 8 ... BBB 5 – Accelerate, Then Brake for a Turn

**RSL 9** ... **BBB 9 – Control in Tighter Spaces** 

RSL 10 ... BBB 10 – Lollipops (24'-26'-28')

RSL 11 ... BBB 11 – Sharing the Road

Ultimate Bike-Bonding *RiderCourse* (UBBRC)

RSL 12 ... UBB 2 – Big Box

RSL 13 ... UBB 6 – Switchbacks

RSL 14 ... UBB 8 – Circuit Training

Advanced *RiderCourse* (ARC)

RSL 15 ... ARC 1 – Warm-Up with Basic Control

RSL 16 ... ARC 2 – Quick Stops

RSL 17 ... ARC 4 – Zigzag

RSL 18 ... ARC 5 – Circle Weaves (40'-45'-56')

RSL 19 ... ARC 6 – Curve Adjustments

RSL 20 ... ARC 7 – Curves: Sweepers and Reverse Turns

RSL 21 ... ARC 8 – Decreasing Radius Curves

RSL 22 ... ARC 10 – Multiple Curves and Swerves

Circuit *RiderCourse* (CRC)

RSL 23 ... CRC – Cornering Circuit

#### Red = Bonding (13) Blue = Braking (3) Green = Cornering (7)

Basic *RiderCourse* (BRC) RSL 1 ... BRC 3 – Starting and Stopping Drill (as a qualifier, if needed) RSL 2 ... BRC 4 – Shifting and Stopping RSL 3 ... BRC 5 – Basic Skill Practice RSL 4 ... BRC 9 – Limited-Space Maneuvers Basic *RiderCourse* 2 (BRC2) RSL 5 ... BRC2 1 – Control at Low Speed RSL 6 ... BRC2 2 – Stopping More Quickly (and Tight Turns from a Stop) RSL 7 ... BRC2 6.1 – Low-Speed Decreasing Radius Curve Basic Bike-Bonding *RiderCourse* (BBBRC) RSL 8 ... BBB 5 – Accelerate, Then Brake for a Turn **RSL 9**... BBB 9 – Control in Tighter Spaces RSL 10 ... BBB 10 – Lollipops (24'-26'-28') RSL 11 ... BBB 11 – Sharing the Road Ultimate Bike-Bonding *RiderCourse* (UBBRC) **RSL 12 ... UBB 2 – Big Box** RSL 13 ... UBB 6 – Switchbacks RSL 14 ... UBB 8 – Circuit Training Advanced *RiderCourse* (ARC) RSL 15 ... ARC 1 – Warm-Up with Basic Control RSL 16 ... ARC 2 – Quick Stops **RSL 17 ... ARC 4 – Zigzag** RSL 18 ... ARC 5 – Circle Weaves (40'-45'-56') RSL 19 ... ARC 6 – Curve Adjustments RSL 20 ... ARC 7 – Curves: Sweepers and Reverse Turns RSL 21 ... ARC 8 – Decreasing Radius Curves RSL 22 ... ARC 10 – Multiple Curves and Swerves Circuit *RiderCourse* (CRC) RSL 23 ... CRC – Cornering Circuit

# **Session Goals**

# 3. Developmental Underpinnings

# **RETS Intellectual Foundations**



## Key <u>Safety Principles</u>

- 1. Crashes are caused by an interaction of factors.
- 2. Riding is risky.
- 3. Riders need a strategy.
- 4. Riders need the physical skills to manage risks.
- 5. Safe riding is more a skill of the eyes and mind than of the hands and feet.

#### Key <u>A</u>dult Learning Principles

- 1. Learning is voluntary.
- 2. Past experience forms the basis for new learning.
- 3. Mutual respect, trust, empathy and sincerity are needed.
- 4. Learning should be high challenge and low threat.



## **Key Motor Skill Principles**

- 1. Motor skills are best learned gross-to-fine.
- 2. Motor skills are best developed with emphasis on accuracy first, then speed.
- 3. Motor skills are best learned with practice that provides feedback (knowledge of results: self and augmented).
- 4. Too much information, or over-coaching, can inhibit learning.
- 5. Random and varied practice is beneficial for learners, and is especially true for retention over time.
- 6. There is a sequence of learning.



# **Overview of Development**



#### **How People Learn: Surface to Deeper**





Mechanism

**Complex Overt Response** 

Adaptation

Origination

Deeper Learning
### **How People Learn: Surface to Deeper**

### KNOWLEDGE

Surface Learning

Lots of content-based, learnercentered, and brain-based learning via self-assessment and group activities

> Meaningful Active Processing Relaxed Alertness Orchestrated Immersion

> > Deeper Learning

### ATTITUDE Surface Learning

Lots of motorcycling knowledge and experience related to safe, responsible riding with emphasis on personal safety values and priorities

Deeper Learning

### MOTOR SKILLS

Surface Learning

Simple-to-complex practice

toward knowledge of results via

first-hand and augmented

feedback

Deeper Learning



## **Conformance to mission specifications**

## and goal achievement

### within publicly accepted standards of

accountability and integrity.



# System Quality

- Participant Satisfaction
- Gains In Knowledge
- Gains In Skill
- Training Itself Is Safe



- Graduate Input After Experience
- RiderCoach Satisfaction

## **Positive Rider Outcomes** (Program Evaluation)

- 1. Reaction (Likes course and RiderCoaches)
- 2. Learning (Improvement: knowledge, skill, self)
- 3. Performance (Can do: knowledge, skill, attitude)
- 4. Behavior (Actually do: actively minimize risk)
- 5. Results (Less crashing, injuries, fatalities)

## 360 Rider: Ride Your Best

- 1. Start Right
- 2. Get Licensed
- 3. Ride More

New MSF initiative that focuses attention from prenovice through experienced riders.

> Toward a reduction in motorcycle violations, crashes, injuries and fatalities.

## **A Rider's Learning Journey**

**Decision to Ride and Formal Training/Education** 

- 1. Complete the MSF website survey as a self-check to see if riding is for you.
  - 1. Are you a higher risk-taker than others you know?
  - 2. Can you ride a bicycle?
  - 3. Can you drive a manual-shift car?
  - 4. Do you see well?
  - 5. Are you mechanically inclined?
  - 6. Are you safety-minded?
  - 7. Do you respect machinery and other equipment that has risk?
  - 8. Can you focus?
  - 9. Can you handle your car in an emergency?
  - 10. Are you willing to invest some time in learning to ride the right way before hopping on a bike?

## A Rider's Learning Journey

### **Decision to Ride and Formal Training/Education**

- 1. Complete the MSF website survey as a self-check to see if riding is for you.
- 2. Complete the Introductory Motorcycle Experience (IME) to confirm desire.
- 3. Complete the Basic *RiderCourse* (BRC) to get the basics on a training motorcycle. [LICENSE or ENDORSEMENT]
- 4. Complete the BRC2 to get the basics on a personal motorcycle.
- 5. To build and maintain skill and confidence, experience any or all:
  - a. Rider Skills Lab (Informal; Menu of 23 skill-building practice exercises).
    - Enroll many times; it could be different each time.
    - May last from 30 minutes to a full day.
  - b. Advanced RiderCourse (ARC).
  - c. Rider Mindset Program (Classroom only).
- 6. Other.
  - a. 3-Wheel Basic RiderCourse.
  - b. AdventureBike RiderCourse.
  - c. *Dirtbike School*.
  - d. Host-An-Event Kits (Public education programs)







# **Rider Levels**

- Level 0 = Self taught and/or rides without a license
- Level I = Completes a learn-to-ride course & licensed
- Level II = I + Completes additional courses
- Level III = II + Reflects on experiences to improve
- Level IV = III + Lifelong learner & subconsciously safe

Is the license test enough? Is a basic rider course enough? Accomplish deeper and longer-lasting learning?

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# MSF eCourses

### Basic e*Course* (Level I, e3)

- Content aligns with BRC Rider Handbook
  - 12 of 16 sections
- Video Enhancements
- 1<sup>st</sup> Person Commentary Rides
- 360° Virtual Reality

### Street Strategies e*Course* (Level I, e2)

• Same as above with only 7 sections

### Human Factors e*Course* (Level II, e2)

- Behavioral Self-Assessment
- Level II content: Human Factors

### Combined Levels I and II

- ePackage 1: Basic with Human Factors (e5)
- ePackage 2: Street Strategies with Human Factors (e4)

## **BRC Variants**





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### BASIC RIDERCOURSE



Level I		Level II		Range
5	X		X	10
<b>e3</b>	X	5	X	10
5	X	5	X	10
eP1	X	Included	X	11*

\*Opening for Rider Skills Lab Exercises

## **BRC2 Variants**



Level I		Level II		Range
6	X	Included	X	5
e2ss	X	3	X	5
eP2	X	Included	X	6

## **3WBRC Variants**





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### 3-WHEEL BASIC RIDERCOURSE



Level I		Level II		Range
8	X	Included	X	6-8
eP1	X	Included	X	7-9*

\*Cannot be offered as a one-day *RiderCourse* 

### **BRC Level I Classroom Topics**

### MSF Basic e*Course* and Rider Handbook

- 1. Course Introduction
- 2. Motorcycle Types
- 3. Controls and Equipment

- 9. Basics for Emergencies
- 10. Special Riding Situations
- **11. Rider Impairments**

## A few big picture highlights

- 6. Risk and Riding
- 7. Basic Street Strategies
- 8. Strategies for Common Situations

- 14. Knowledge Test
- 15. Next Steps
- 16. Range Preparation

## **Risk Offset**



## **Average Riders**



## **Inferior Riders**



**Risk Offset** 

## **Superior Riders**



# **SEE Chart**



### CLOCK FACE OF FACTORS 77.1 vs 3.2%



## **QUICK TIPS: Pretend You Are Invisible**

If you ride a motorcycle, you know that out on the road you might as well be transparent, because car drivers often look right past you. They might notice the car or truck behind you, but you, in all your "narrowness," may not register in the visual cortex of even the most alert drivers.

That's why an oncoming car driver might turn left in front of you at an intersection.



That's also why a driver in the next lane, even if they turn and look in your direction before changing lanes, might veer into your lane.



Sadly, drivers might behave this way even when they're not distracted by their cell phone, GPS, satellite radio, or other form of in-car infotainment. So how do you compensate for being "invisible" to drivers?

**Be as conspicuous as possible.** Wear bright clothing and a light-colored helmet. Always have your headlight on, and use your high beam or an aftermarket headlight modulator during the day (where allowed).

**Take an approved rider training course.** Learn how to maneuver your motorcycle in normal and emergency situations, and practice braking and swerving maneuvers often. Also understand that safe riding depends as much on the mental skills of awareness and judgment as it does on the physical skill of maneuvering the machine; respond early to possible hazards instead of having to react instantly to an emergency.

**Pretend you're invisible.** If you assume others on the road can't see you, and any car that *can* hit you *will* hit you, you will tend to ride in a hyper-aware mindset and learn to notice every detail in your surroundings. In other words, you will take extra responsibility for your safety and ride defensively. You will vary your speed and lane position to place yourself in the best spot on the road to avoid collisions, plan escape paths in case a driver violates your right-of-way, cover your brake controls to quicken your reactions, use your horn to alert a driver who doesn't notice you, and always ride within your limits.

#### CAR DRIVERS ONLY SEE WHAT THEY EXPECT TO SEE, AND MOST DON'T EXPECT YOU TO BE PART OF THE TRAFFIC MIX. RIDE WITH THE RIGHT SKILLS, STRATEGIES, AND ATTITUDE. BE SEEN – BE SAFE.

### **FOOL'S GEAR**

#### HEAD

Considered precious by sensible people; never exposed by the pros. When fully in view, allows immediate identification of unsafe person not using his or hers. Hand out rider education info on sight.

#### EVES, EARS & FACE

Exposure leads to irrritated eyes, noisedeafening windblast, and distracting impacts from bugs and road debris.

#### HANDS

Au naturel (not for long). Known to lock into curled position when exposed to cold; not genetically evolved to withstand abrasion.

#### BARE LIMBS

A phenomenon seen only in riders who think it's other people who crash. Subject to ridicule in riding circles.

#### FLIP FLOPS

Terminology for what sandals, toes and feet do upon contact with road surfaces, shift lever, brake pedal, or footrests.

BOTTOM LINE

Fool's gear identifies an unaware rider. Learn how to avoid embarrassment, ridicule, and injury, while gaining valuable skills and knowledge by completing an MSF *RiderCourse*<sup>44</sup>.

800.446.9227 or msf-usa.org or contact:

### **COOL GEAR**

#### HEAD

Most important piece of protective gear a rider can use. Protects against head injury, windblast, cold, and flying objects. Full-face helmet recommended.

#### FACESHIELD

"Saves face." Any rider who's been hit in the face by stones, insects, or debris can tell you the benefits.

#### GLOVES

Keep hands comfortable, functional, and protected. There's an infinite variety for all seasons.

#### JACKET AND PANTS

Long sleeves and sturdy trousers resist abrasion and protect against sunburn, dehydration, or hypothermia. Some riders wear padded gear with "body armor" for more protection. Light colors in the daytime and reflectivity at night make it easier for car drivers to see you.

#### BOOTS

Provide protection against foot and ankle injuries and give you a good grip on footrests or road surfaces.

#### BOTTOM LINE

Dress for the ride as well as for the crash. Proper riding gear allows you to enjoy the ride in comfort and helps minimize injury.



### **Seriously Safe Top Ten List**

Take formal training and get licensed

**Ride unaffected by** alcohol or drugs

Maintain 360° awareness

Enter intersections and curves with caution

Safe aggressive riding for the racetrack



Take formal training and get licensed





Maintain 360° awareness

Enter intersections and curves with caution

Save aggressive riding for the racetrack



Wear all gear when riding

Create a space cushoin all around



Practice emergency braking and swerving



Refresh your skills and knowledge regularly

#### Where all gear while riding

Assume all others don't see you

#### Create a space cushion all around

#### **Practice emergency** braking and swerving

#### Refresh your skills and knowledge regularly

### **TCLOCS**<sup>®</sup> **INSPECTION CHECKLIST**

Crontison         Condision         Trade SegAr, weak, weathwring, evenly asset, bulger, embadded object.         Final         Final         Trade         SegAr	T-CLOCS ITEM	WHAT TO CHECK	WHAT TO LOOK FOR	CHECK	-OFF
The image of the section of the sectin of the sectin defined of the section of the section of the secti	T-TIRES & WHE	ELS			
Important         Circle work cold, adjust to ladd, Secoles         Funct Insure insure	Tires	Condition	Tread depth, wear, weathering, evenly seated, bulges, embedded objects.	Front	Rear
SymbolSymbolBoth denomination frame frame production of productin		Air Pressure	Check when cold, adjust to load.	Front	Rear
Gate         Cateds ords, array Spin whesi links against stateway prints.         With the spin spin spin spin spin spin spin spin	Wheels	Spokes	Bent, broken, missing, tension, check at top of wheel: "ring" = OK — "thud" = loose spoke.	Front	Bea
Image         Out of conductors = fram, 5pn of the spin spin shore on you fixed, between hubban dasks, form in the spin spin shore on and then. No frequely (alche) between hubban dasks, form in the spin spin shore on and then. No frequely (alche) between hubban dasks, form in the spin spin shore on and then. No frequely (alche) between hubban dasks, form in the spin spin shore on and then. No frequely (alche) between hubban dasks, if the spin spin shore on and then who frequely (alche) between hubban dasks, if the spin spin shore on and then who frequely (alche) between hubban dasks, if the spin spin shore on and then who frequely (alche) between hubban dasks, if the spin spin shore on and then who frequely alche dasks where alche in the spin spin shore on and the spin spin shore on and the spin spin shore on a spin spin shore on a spin spin shore on a spin spin spin spin spin spin spin spin		Cast	Cracks, dents.	Frani	Rear
Beaking         Gale togoth and flam Max No freeploy (skick) between hub and aub.         Insert		Rims	Out of round/true = 5mm. Spin wheel, index against stationary pointer.	Front	Sear
SahlCadebal.com/tom, excessing parame on unside, mellah haroom anound outside.TreedRefFunctionCarditationSchi bake abore states pile from rolling.TreedNoneNoneFardiobarnConditionBeak are statight, turn freedy, handgrins and ber ands, are secure.IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Bearings	Grab top and bottom of tire and flex: No freeplay (click) between hub and axle, no growl when spinning.	Front	3car
Bakes         Function         Each law alow keeps bills from foling.         The output of	10.00	Seals	Cracked, cut or torn, excessive grease on outside, reddish-brown around outside.	Tront	Rear
Constitution         Check pasks and disc for weak.         Find         The off bar is and pask and disc for weak.         Find         The off bar is and pask and disc for weak.         Find         The off bar is and pask and disc for weak.         Find         The off bar is and pask and disc for weak.         Find         The off bar is and pask and disc for weak.         Find         The off bar is and pask and disc for weak.         Find         The off bar is and pask and disc for weak.         Find         The off bar is and pask and disc for weak.         Find	Brakes	Function	Each brake alone keeps bike from rolling.	Front	Sea
C CONTROL Finalitabar Condition Base are straight; turn freely, handgrips and bar ends are secure. Lorers and Pedal Condition Freesing Pedal Presis Lubricated. Presis Pre		Condition	Check pads and discs for wear.	Front	Rear
Handlebary         Condition         Bask are staging to in free hyb. handgings and bar not space seques.         Image: space seques and space seques.           Proofs         Lubricated.         Proofs         Lubricated.         Image: space seques se	C-CONTROLS		·	-	
Lawers and Pedal         Condition         Protosic         Lab/Tack         Superstant Superst	Handlebars	Condition	Bays are straight, turn freely, handgrips and bar ends are secure.		
Phots         Lubrizated.         Image         Image <thimage< th="">         Image         Image</thimage<>	Levers and Pedal	Condition	Broken, bent, cracked, mounts tight, ball ends on handlebar levers, proper adjustment.		
Cale         Condition         Frequency is labeled in the information and and interior.         Image: im		Pivots	Lubricated.		
Beam         No interference or pulling at accering head, suppervision, no sharp angles, white supports in place.           Head         Boxning.         No interference or pulling at its emplished, suppervision, no blace angles, hose supports in place.           Throat Ide         Operation         Moves freakly, supp. closed, no reving when handhakans are humed.         Image and transmission is an and tight, electrolyte level, held down securely.         Image and transmission is an and tight, electrolyte level, held down securely.         Image and transmission is an and tight, electrolyte level, held down securely.         Image and transmission is an and tight.           Headlang         Condition         Tende telefort, no surfage and adjustment system.         Image and transmission is a dipatement system.         Image and transmission is a dipate	Cables	Condition	Fraying, kinks, lubrication: ends and interior.		
Horse         Condition         Circle (Calc), class, class		Routing	No interference or pulling at steering head, suspension, no sharp angles, wire supports in place.		
Botting         No interference or pulling at taken parked, supports in pake.           Thruttie         Operation         Mover freely, supports in reprivation, no share angles, how supports in place.           L-LICHTS & ELECTRICS         Immediate class and tight, electrolyte level, held down securely.         Immediate class and tight, electrolyte level, held down securely.           Headlamp         Condition         Cacks: reflector, mounting and adjustment system.         Immediate class and tight.           Turn signals         Operation         Cacks: reflector, mounting and adjustment system.         Immediate class and tight.           Turn signals         Operation         Cacks: reflector, mounting and adjustment system.         Immediate class and tight.           Netros         Condition         Cacks: reflector, mounting and system class application.         Immediate class and tight.           Netros         Operation         Advances construction correctly: engine cut off, hi/low basins, turn signal.         Immediate class and tight.           Nitros         Condition         Cacks, class, down, durin mounts and swite fight.         Immediate class and tight.           Nitros         Condition         Cacks, class and tight.         Immediate class and tight.           Nitros         Condition         Cacks, class.         Immediate class and tight.           Nitros         Condition         Cackel, before, securely	Hoses	Condition	Cuts, cracks, leaks, bulges, challing, deterioration.	-	
Denote         Operation         Moves treasy, range code, nor reving when handlebars are tunned.           LILENTS & ELECTRICS         Imminists class and tight, electrolyte level, held down securely.         Imminists class and tight, electrolyte level, held down securely.           Headlang         Condition         Texninatis class and tight, electrolyte level, held down securely.         Imminists class and tight, electrolyte level, held down securely.           Tai lamp brake         Condition         Casks, clean and tight, electrolyte level, held down securely.         Imminists class, and and tight, electrolyte level, held down securely.           Turn signals         Operation         Activates upon front brakely elevel, elevel, fillow baars, turn signal.         Imminist if elevel held if elevel.           Seltches         Operation         Activates upon front brakely engine cut off, Milow baars, turn signal.         Imminist if elevel held if elevel.           Nirrors         Condition         Cracks, clean, light mounts and servel glotts.         Imminists.         Imminists.           Seltches         Operation         All weither setted on blee.         Imminists.         Imminists.           Condition         Cracks, clean, light mounts and servel glotts.         Imminists.         Imminists.           Condition         Cracks, clean, light mounts and servel glotts.         Imminists.         Imminists.           Condition         Cracks of pa		Routing	No interference or pulling at steering head, suspension, no sharp angles, hose supports in place.	-	
C-HUEF 15 & ELEU HICS     Barery     Condition     Terminals clean and tight, electrolyte level, held down securely.     Vent Tube     Not kinked, routed properly, not plugged.     Condition     Cacks, reflector, mouting and adjustment system.     Tal lamp brake     Condition     Cacks, reflector, mouting and adjustment system.     Tal lamp brake     Condition     Cacks, reflector, mouting and adjustment system.     Condition     Cacks, reflector, mouting and adjustment system.     Tal lamp brake     Condition     Cacks, clean, tight mounts and swited joints.     Wing     Condition     Cacks, clean, tight mounts and swited joints.     Leues & Reflectors     Condition     Cacks, indition     Candition     Cacks, indition     Cacks, inditin     Cacks, inditin     Cacks, inditin     Cacks, indition     Ca	Inrottie	Operation	moves meety, snaps closed, no revving when handlebars are turned.	1	-
Bartery         Condition         Terminals class and tight, electradyte level, held dawn securely.           Headlang         Condition         Cacks. reflector, mounting and adjustment system.         Image: Condition         Cacks. reflector, mounting and adjustment system.         Image: Condition         Image: Condition         Cacks. reflector, mounting and adjustment system.         Image: Condition         Image: Condition         Cacks. reflector, mounting and adjustment system.         Image: Condition         Image: Condition </td <td>L-LIGHTS &amp; ELE</td> <td>CTRIC5</td> <td>Te</td> <td>1</td> <td></td>	L-LIGHTS & ELE	CTRIC5	Te	1	
Vert Tube         Not Kinked, routed properly, not keyged.         Second	Battery	Condition	Terminals; clean and tight, electrolyte level, held down securely.	-	
Head Image         Condition         Cacks. reflector, mounting and adjustment system.         Image		Vent Tube	Not kinked, routed properly, not plugged.		
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Tai Implaysise     Condition     Cacks, dean and tight.     Incred, dean and tight.       Turn signals     Operation     Activate upon from the keiner brake application.     Imax heff       Switches     Operation     All switches function correctly, engine cut off, hildow beam, hum signal.     Imax heff       Switches     Operation     Ann     Aquat when setted on bike.     Imax heff       Lenses Sheffectore     Condition     Cracks, clean, tight mounts and swited joints.     Imax heff       Wiring     Condition     Cracks, clean, tight mounts and swited joints.     Imax heff       Wiring     Condition     Cracks, clean, tight mounts and swited joints.     Imax heff       Wiring     Condition     Fraying, chefing, insulation.     Imax heff       O-Oil & OTHE FUUDS     Engine Oil     Check warm on center stand on level ground dipstick sight glass.     Imax       Coolant     Reservoir and/or coolant recovery tank — check only when cool.     Imax     Imax       Gear Oil, Shaft Drive     Gaskets, abaits, housing, stalls.     Imax     Imax       Coolant     Reservoir and/or coolant recovery tank — check only when cool.     Imax     Imax       Gear Oil, Shaft Drive     Gaskets, abaits, stall press.     Imax     Imax       Coolant     Reservoir and/or coolant recovery tank — check only when cool.     Imax       Frane     <	A A Description Doc. 14	Aim	Height and right/left.	-	_
Upperation         Petrovine upon (monter production for an explanitation).         Pears left	Tail lamp/brake lamp	Condition	Cracks, clean and tight.		_
Hinri sgnal.         Upferlation         France Control/y.         France         Franc         France         France <td>T</td> <td>Uperation</td> <td>Activates upon front brake/rear brake application.</td> <td>Parel A</td> <td>Tran de</td>	T	Uperation	Activates upon front brake/rear brake application.	Parel A	Tran de
Switches         Operation         All switches function correctly engine cut off, M/kow heam, turn signal.         Image: Condition         Credex, clean, inplin transmission           Mirrors         Aim         Adjust when seated on bike.         Image: Condition         Credex, clean, inplin transmission         Image: Condition         Credex, issue when seated on bike.           Letuse & Brellectori         Condition         Proving, inslution         Image: Condition         Fraving, inslution         Image: Condition	ium signais	Operation	Operation Flashes correctly.		Bearrig
Mirrors         Candian         Candian <t< td=""><td>Switches</td><td>Operation</td><td>All switches function correctly: engine cut-off, hi/low beam, turn signal.</td><td>1.1.1.1</td><td>-</td></t<>	Switches	Operation	All switches function correctly: engine cut-off, hi/low beam, turn signal.	1.1.1.1	-
Aim         Adjust when stated on blike.         Image: State of the	Mirrors	Condition	Cracks, clean, tight mounts and swivel joints.	11	
Lense & Breflectors         Condition         Cracked, broken, securely mounted, excessive condensation.         Image: Condition         Figure Condit		Aim	Adjust when seated on bike.	11	
Wine         Condition         Projning insulation.         Image: State Sta	Lenses & Reflectors	Condition	Cracked, broken, securely mounted, excessive condensation.	*	
Boarting         Prinched, no interference or pulling at steering head or suspension, wire looms and ties in place.           O-OIL & OTHER FLUIDS         Exercise         Engine OII         Check warm on center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstick sight glass.         Image: Comparison of the center stand on level ground: dipstex trever stand; fittings, pl	Wiring	Condition	Fraying, chafing, insulation.	14 g	
Condit & OTHER FLUIDS         Expression         Expression           Levels         Engine Oil         Check warm on center stand on level ground: dipstick sight glass.		Routing	Pinched, no interference or pulling at steering head or suspension, wire looms and ties in place,		
Control         Engine OII         Check warm on center stand on level ground dipstick sight glass.	0.00 0.07050	E ODE	connectors agin, dears	4	
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Image and come interval target target target target target target.         Image and target targ	Levels	Cost Oil Shoft Drive	Check warm on center stand on level ground, dipsuck, signi glass	1	_
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Constitution         Inderivation antion/or Constitution/or Constitutin/or Constitution/or Constitutin/or Constitution/or Cons		Coalant	Brakes, crutch, reservoir of sight glass.	-	
Index         Jame Off         Jame Off <thjame off<="" th="">         Jame Off         <th< td=""><td>11.11</td><td>Coplant</td><td>Reservoir ano/or cogrant recovery tank — check only when cool.</td><td>-</td><td>_</td></th<></thjame>	11.11	Coplant	Reservoir ano/or cogrant recovery tank — check only when cool.	-	_
Langention         Langention <thlangention< th="">         Langention         Langenti</thlangention<>	Canter	Finaina Cil	Garkati bauringa saala	-	
Order of an offer of the solution of the set of the se	Leans	Gear Oil Shaft Drive	Garkate casic hypothese		
Index         Todes         Todes <td< td=""><td></td><td>Nodemalic Cluid</td><td>Haras mate suindae salaan</td><td>-</td><td></td></td<>		Nodemalic Cluid	Haras mate suindae salaan	-	
Status         Status         Status         Status         Status           Field         Lines, fuel valve, carbs.		Coolant	Badiator, hoses, tanks, fittings, nipes	-	
C-CHASSIS Frame Condition Cracks at gussets, accessory mounts, look for paint lifting, Steeping-Head Beings abulg the spot streegh plut lifting, Supports and the second travel, equal all pre-load/air pressure/damping, anti-dive settings. Left 500 Point or Belt Tension Cracks at guites the second and pre-load/air pressure/damping, anti-dive settings. Left 500 Chain or Belt Tension Cracks at guites to those do not lubricate belts. Sproclasts Terth not hosked, securely mounted Streep and those do not lubricate belts. Chain or Belt Tension Cracks, bent, Claps & Cotter Pins Brokers, masing, S-STANDS Center stand Condition Cracks, bent, Retention Spring in place, tension to hold position. Side stand Cracks, bent, Spring in place, tension to hold position. Side stand Cracks, bent, Spring in place, tension to hold position. Side stand Cracks, bent, Spring in place, tension to hold position.		Eucl	Lines fuel valve carbs		
Frame         Condition         Cracks at gussets, accessory mounts, look for paint lifting.           Frame         Storeing-Head Bearings         No detern or tiphs spot through full tavel, raise front wheel, check for play by pulling/pulsing fullsing.         No detern or tiph spot through full tavel, raise front wheel, check for play by pulling/pulsing fullsing.         No detern or tiph spot through full tavel, raise front wheel, check for play by pulling/pulsing fullsing.         No detern or tiph spot through full tavel, raise front wheel, check for play by pulling/pulsing fullsing.         No           Storpersion         Front Forks         Smooth tavel, equal pre-load/air pressure/damping actifugs, linkage moves         Loft         Rig tap           Chain or Beir         Tension         Check at tightest point.         Loft         Rig tap           Sprodets         Teref hort hooked, securely mounted         Sprodets         Teref hort hooked, securely mounted           Fasteners         Tipte acceler Pins         Brokers, masing.         Sprodets           S-STANDS         Condition         Cracks, bent.         Springs in place, tension to hold position.           Side stand         Condition         Cracks, bent.         Springs in place, tension to hold position.	C-CHASSIS				
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Support         Op/Dating/Indiana, Units.         Image: Indiana, Image: Indiana, Image: Indiana, Image: Ima	(TABLE)	Steering-Head	No detent or tight spots through full travel, raise front wheel, check for play		-
Supportsion         Genetic free         The set of the se		Swingarm Bushings	Baise rear wheel shark for play by nuching/milling swingarm	-	-
International         Internaternat         International         Internat	Suspension	Front Forks	Smooth travel equal air pressure/daming anti-dive settings	100	stick
Interview         Freely and its lubiticated.         Lot freely and its lubiticated.         Big           Chain or Belt         Tension         Check at tightes point.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiticate beits.         Image: State plates when hor. Note: do not lubiti	- aspension	Rear Shock(s)	Smooth travel, equal or pressure/damping and sine zettings	Long -	- Might
Chain or Beit         Tension         Check at tightest point.           Lubrication         Side plates when hor. Note: do not lubricate beits.         Image: Check at tightest point.           Sprockats         Tenston to hooked, securely mounted         Image: Check at tightest point.           Sprockats         Tenston to hooked, securely mounted         Image: Check at tightest point.           Fasteners         Threaded         Tight, missing boits, nuts.         Image: Check at tightest point.           Sprockats         Tenston to hooked, securely mounted         Image: Check at tightest point.         Image: Check at tightest point.           Sprockats         Tenston to hooked, securely mounted         Tight, missing.         Image: Check at tightest point.           Sprockats         Condition         Cracks, bent.         Image: Check at tightest point.           Sprockats         Condition         Cracks, bent.         Image: Check at tightest point.           Side stand         Condition         Cracks, bent (after curb which hor pad equipped).         Image: Check at tightest point.		lines - tracted	freely and is lubricated.	Left	Eight
Lubrication         Side plates when her. Note do not lubricate baits.           Spinolates         Teeth inci hooked, securely mounted           Fasteners         Timeded         Timit mising bolins, nuts.           Clips & Cotter Pins         Brokers, missing.         Image: Complete teeth secure teeth	Chain or Belt	Tension	Check at tightest point.	-	
Spinockets         Tearth not hooked, securely mounted           Fasteners         Tipk         Tight, missing holts, nuts.           Clips & Cotter Pins         Broken, missing.           S-STANDS         Condition         Cracks, bent.           Setter stand         Condition         Cracks, bent.           Side stand         Condition         Cracks, bent (dirty curbout switch or pad equipped)		Lubrication	Side plates when hor: Note: do not lubricate belts.	-	
Fastemens         Threacted         Tight, missing bolts, nuts.           Clips & Cotter Pins         Broker, missing.         Image: Control Contro Control Control Control Cont		Sprockets	Teeth not hooked, securely mounted		
Clips & Cotter Pins         Broken, missing.           S-STAINOS         Condition         Cracks, bent.           Retention         Springs in place, tension to hold position.         Image: Condition           Side stand         Condition         Cracks, bent (afety cut-out switch or pad equipped).         Image: Condition	Fasteners	Threaded	Tight, missing bolts, nuts.		
S-STANDS Center stand Condition Cracks, bent. Center stand Condition Cracks, bent, Cracks, bent, Cracks, bent, tension to hold position. Cracks, bent, tension to hold position. Cracks, bent (after y cut-out switch or pad equipped)		Clips & Cotter Pins	Broken, missing.		
Center stand         Condition         Cracks, bent.           Retention         Springs in place, tension to hold position         Image: Springs in place, tension to hold position           Side stand         Condition         Cracks, bent (aftery cut-out switch or pad equipped).         Image: Springs in place, tension to hold position	S-STANDS			-	
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La reaction description of the second states of the	Side stand	Condition	Cracks, bent (safety cut-out switch or pad equipped)	J	_
Retention Springs in place, tension to hold position.		Retention	Springs in place, tension to hold position.	1	
The bird sector of the sector	i-STANDS ienter stand	Clips & Cotter Pins Condition Retention Condition	tracks, bent. Springs in place, tension to hold position. Cracks, bent (affer out-out switch or pad equipped) Cracks, bent (affer out-out switch or pad equipped) Cracks, bent (affer out-out switch or pad equipped)		

### **BRC Range Exercises and Skill Test**

- 1. Motorcycle Familiarization
- 2. Using the Friction Zone
- 3. Starting and Stopping Drill
- 4. Shifting and Stopping
- 5. Basic Skill Practice
- 6. Pressing to Lean and Adjust Lean
- 7. Stopping More Quickly
- 8. Stopping Distance Demonstration
- 9. Limited-Space Maneuvers
- 10. Stopping in a Curve
- 11. Curve Judgment
- 12. Multiple-Curves and Lane Changes
- 13. Crossing an Obstacle and Swerving
- 14. Skill Practice



### **Skill Test**

- 1. Cone Weave and Normal Stop
- 2. Turn From a Stop and U-Turn
- 3. Quick Stop
- 4. Obstacle Swerve
- 5. Curve

## From the BRC RiderCoach Guide

The BRC is more than a simple skills training program. In addressing the basic knowledge, skill, attitude, habits, and values required for riding on the street, the BRC targets the higherorder behavioral aspects of safe riding; in other words, what riders do and why they do it. (p29)



### **BRC Level II Behavioral Activities**

- 1. Rider Self-Assessment
- 2. Constructing an Intersection Crash
- 3. Constructing a Curve Crash
- 4. Driving Tendencies
- 5. Knowing Where to Look and What to Look For
- 6. Visual Acuity Peripheral Vision Useful Field of View – Central Vision – Reaction Time
- 7. Serious About Safety?
- 8. Safe vs. Risky Riding Behaviors
- 9. Key Safety Concepts (Situational Awareness)
- 10. Values, Judgment, and Choices

### **Rider Self-Assessment**

For each of the six items below, place a number from 1 (low) to 10 (high) in the space provided for each item for yourself as a motorcyclist.

Item	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
Motorcyclist knowledge												
Motorcyclist skill												
Perceptual ability in traffic												
Cooperation in traffic												
It will happen to me (It being a crash)												
Emotional commitment to riding safely												

## Activity 1. Pre-Riding Quiz

5		PRE-RIDING QUIZ		A	-1
Nan	ne		Date	_	
Dire	ctions: Respond to the following questions and	statements.			
1.	I am able to ride a bicycle.			Yes No	-
2.	T-CLOCS refers to:				
	a. A pre-ride inspection routine.				

# Key reminders prior to the first range exercise.

### Then off to the range to acquire physical skills for riding a motorcycle.

When stopping, squaring the bars keeps the motorcycle upright and easier to hold

8. From the image below, place the number of the control in the space provided.



Shift lever
Rear brake pedal
Throttle
Front brake lever
Clutch lever

## Activity 2. Construct a Crash Select Factors – Intersection

A-2



SELECT FACTORS – AT AN INTERSECTION

### Interaction of factors.

## One factor is enough to make a difference. There are many more factors than these.

11. High BAC	11. Overloaded	11. Night
12. Affected by medication	12. Loose tank bag	12. Manhole covers in path
13. Showing off	13. No turn signal	13. Raining
14. Trying to beat a yellow light	14. Bent handlebars	14. Slick surface
15. Looking at sidewalk activity	15. No mirrors	15. Foggy conditions

Note: Crashes usually consist of an interaction of factors. Eliminating just one factor has the potential to prevent a crash. Sometimes only one factor is enough to produce a crash. There are many more than these 45 factors and potential combinations number in the thousands. A strategy to reduce risk must be ever-present.

## Activity 3. Construct a Crash Select Factors – In a Curve



SELECT FACTORS – IN A CURVE

A-3

### Interaction of factors.

### One factor is enough to make a difference.

### There are many more factors than these.

11. Distracted	11. No mirrors	11. Night
12. Looking at the scenery	12. Bent handlebars	12. No painted lines
13. Affected by medication	13. Overloaded	13. Raining
14. Showing off	14. Worn rear brakes	14. Unmarked decreasing-radius curve
15. Trying to keep up with others	15. Brake fade on downhill grade	15. Foggy conditions

Note: Crashes usually consist of an interaction of factors. Eliminating just one factor has the potential to prevent a crash. Sometimes only one factor is enough to produce a crash. There are many more than these 45 factors and potential combinations number in the thousands. A strategy to reduce risk must be ever-present.

## Activity 4. Driving Tendencies

Human factor tendencies: Toward risk or toward safety?

### Conclusion

We must honestly selfassess our personal approach to safety.



Risk

A BAPET FOUNDATION	
Directions: Place an X along the line in a position that best describes your regular car drivin Imagine how someone who knows you well might score you.	ng tendencies.
Hurried 👞	🕳 Relaxed
Impulsive и – – – – – – – – – – – – – – – – – –	➤ Steady
Overconfident и	← Confident
Easily Distracted 🛥 – – – – – – – – – – – – – – – – – –	➡ Focused
Rebellious и – – – – – – – – – – – – – – – – – –	➤ Compliant
Non-conformist и – – – – – – – – – – – – – – – – – –	<ul> <li>Cooperative</li> </ul>
Disrespectful 🗲	← Respectful
Reckless 🛥 – – – – – – – – – – – – – – – – – –	← Forethought
Arrogant 🛥	► Humble
isky Thrill Seeker 🚓 💶 💶 💶	➡ Safe Thrill Seeke
Irresponsible и	➡ Responsible
Stressed 🛥	► Calm

DRIVING TENDENCIES

A-4

People tend to drive as they live, and most drivers rate themselves as above average. Drivers who are generally safety-minded when driving will likely be safety-minded when riding. Warning: A temporary or momentary lapse to the left side can have negative results.

## **Rider Quiz**

- 15. When dealing with glare from oncoming headlights, it's best to:
  - A. Focus on the lights
  - B. Blink quickly until the light source passes
  - C. Look at the right side of the roadway surface

## **Rider Quiz**

### 16. Inattentional blindness refers to:

- A. Looking but not seeing
- **B. Night blindness**
- C. Dozing off when riding

### Front lower right surface?

### Back upper left surface?



### Front upper left surface?

**Back lower right surface?** 

Front lower right surface if shaded area is front.



Back lower right surface if shaded area is back.


## Back upper left surface if shaded area is back.

Front upper left surface if shaded area is front.

## Where to look ... What to look for





### Conclusion

For an identical traffic situation, one operator may not see a problem when another perceives a collision trap.

# **SEE – The Strategy**

# Improving Perception

#### VISUAL

Acuity Far-Near & Side-to-Side

### COGNITIVE

Attention Judgment Priority

### **MOTOR SKILL**

Smooth Well-timed

Search

# Evaluate

SEE



## Activity 6a. Visual Acuity



## Conclusion To perceive traps and escape paths, we must be able to see clearly.



VISION AND REACTION TIME SCORE SHEET (NON-MEDICAL LEARNING ACTIVITY)

A-6

Date & Initials

#### Visual Acuity

Visual acuity refers to clearness of vision. Normal visual acuity is commonly referred to as 20/20, meaning you see at 20 feet what a person with normal vision sees at 20 feet. This number is used for both eyes or for each eye individually. If the second number is higher, like 20/40, this indicates weaker visual acuity (you see at 20 feet what a person with 20/20 visual acuity can see at 40 feet). If the second number is lower, like 20/15, this indicates better-than-average visual acuity (you see at 20 feet what a person with 20/20 visual acuity sees at 15 feet).

Visual acuity: Both eyes: \_\_\_\_\_ Left eye: \_\_\_\_\_ Right eye: \_\_\_\_\_

#### Peripheral Vision

Peripheral vision refers to how well you see to the sides while looking straight ahead. While central, clear vision is a threedegree cone (and our eyes move so quickly our surroundings mostly look in focus), peripheral vision can exceed 90 degrees per side.

Peripheral vision (first see the card):	Either side
Useful field of view (see color of card):	Either side
Central vision (see actual card):	Either side

(Less than 140 degrees of total peripheral vision is considered tunnel vision.)

#### **Reaction Time**

Simple reaction time refers to how quickly a person responds to a stimulus that is anticipated. Reaction time varies among individuals and is affected by perception time. One way to check a person's general reaction time is to catch a ruler dropped between two fingers. Where the ruler is caught indicates reaction time. Try 10 times to get 10 scores. The average catch is between the 5- and 7-inch marks.

Score for each catch:

My average:

(Factors: age, fatigue, priority, and distraction)

# What do you see? You are on your motorcycle and observe this...

#1



## 1) The center lane on this road is used for:

- a. Passing vehicles.
- b. Making left turns from both directions.
- c. Protected left turns.

## 1) The center lane on this road is used for:

- a. Passing vehicles.
- b. Making left turns from both directions.
- c. Protected left turns.







- 2) The chevron alignment signs inform you that:
  - a. The curve ahead has a decreasing radius.
  - b. The curve ahead is rather sharp.
  - c. There is no shoulder for escape.

- 2) The chevron alignment signs inform you that:
  - a. The curve ahead has a decreasing radius.
  - **b.** The curve ahead is rather sharp.
  - c. There is no shoulder for escape.



## Activity 6b: Side / Peripheral Vision (use A-6 to record scores)

With floor mat and cards, check:

Peripheral vision
Useful field of view

3. Central vision

ION AND REACTION TIME SCORE SHEET A-6 (NOR-MEDICAL INARIANA ACTIVITY)		
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# Let's see how fast our eyes and mind can work...

In your groups, see if you agree on the meaning of these signs. They will appear for only a fraction of a second.





## Left Turn Only



Next Sign



# Sharp Left Turn



Next Sign



# No Right Turn











# Winding Road



# No U-turn

## Next 2 signs







# Sharp Right Turn



# Narrow Bridge
### Last 2 signs









Lane Added





Lane Added

### Conclusion

See how quickly the eyes and mind can work if safety is a conscious priority! Search & Evaluate for a Collision Trap

Instructions:

1. A situation will show for four seconds.

2. The situation will be shown again for review.

You are on your motorcycle traveling down a roadway and observe this...

Trap 1





Traffic Controls & Roadway Features Highway Users Surface Conditions Escape Paths







Traffic Controls & Roadway Features Highway Users Surface Conditions Escape Paths

### Conclusion

The things we teach ourselves to look for and make a priority, we perceive first. We must see traps and escape paths.

Note: If we fail to see what is plainly visible, we have what is called *inattentional blindness (the brain is not seeing)*. Other highway users may have it and not see us!

### Activity 6c. Reaction Time

Follow RiderCoach Instructions. Conclusion To be a better decision-maker (survivor), it helps to consider reaction time.



VISION AND REACTION TIME SCORE SHEET (NON-MEDICAL LEARNING ACTIVITY) A-6

Date & Initials

### Visual Acuity

Visual acuity refers to clearness of vision. Normal visual acuity is commonly referred to as 20/20, meaning you see at 20 feet what a person with normal vision sees at 20 feet. This number is used for both eyes or for each eye individually. If the second number is higher, like 20/40, this indicates weaker visual acuity (you see at 20 feet what a person with 20/20 visual acuity can see at 40 feet). If the second number is lower, like 20/15, this indicates better-than-average visual acuity (you see at 20 feet what a person with 20/20 visual acuity sees at 15 feet).

Visual acuity: Both eyes: \_\_\_\_\_ Left eye: \_\_\_\_\_ Right eye: \_\_\_\_\_

### Peripheral Vision

Peripheral vision refers to how well you see to the sides while looking straight ahead. While central, clear vision is a threedegree cone (and our eyes move so quickly our surroundings mostly look in focus), peripheral vision can exceed 90 degrees per side.

> Peripheral vision (first see the card): Useful field of view (see color of card): Central vision (see actual card):

Either side \_\_\_\_\_ Either side \_\_\_\_\_ Either side \_\_\_\_\_

(Less than 140 degrees of total peripheral vision is considered tunnel vision.)

### **Reaction Time**

Simple reaction time refers to how quickly a person responds to a stimulus that is anticipated. Reaction time varies among individuals and is affected by perception time. One way to check a person's general reaction time is to catch a ruler dropped between two fingers. Where the ruler is caught indicates reaction time. Try 10 times to get 10 scores. The average catch is between the 5- and 7-inch marks.

Score for each catch:

\_\_\_\_\_

My average: (Factors: age, fatigue, priority, and distraction)

MSF BASIC RIDERCOURSE" RIDER HANDBOOK



### SERIOUS ABOUT SAFETY?

### As a car or truck driver, respond to the following statements.

1.	I signal for turns and lane changes.	Yes	Sometimes	No
2.	I stop completely at stop signs.	Yes	Sometimes	No
3.	I stop completely before turning right on red.	Yes	Sometimes	No
4.	I make decisions based on safety.	Yes	Sometimes	No
5.	Others consider me a courteous driver.	Yes	Sometimes	No
6.	I turn my head to check blind spots for lane changes.	Yes	Sometimes	No
7.	I buckle up.	Yes	Sometimes	No
8.	I honk at bad drivers.	Yes	Sometimes	No
9.	I use my cell phone to talk or text.	Yes	Sometimes	No
10.	I need to brake hard or swerve when driving normally.	Yes	Sometimes	No
11.	Lam in a hurry when Edrive.	Yes	Sometimes	No
12.	My friends crash and get tickets.	Yes	Sometimes	No

### **Discussion point:**

Anything but a Yes on 1-7 and a No on 8-12 may indicate a less than ideal emotional commitment to safety. Agree or disagree? Why?

### Activity 7. Serious About Safety?

Follow RiderCoach Instructions.

### Conclusion

What we say we do and what we actually do may differ.



SERIOUS ABOUT SAFETY?

As a car or truck driver, respond to the following statements.

1.	I signal for turns and lane changes.	Yes	Sometimes	No
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8.	I honk at bad drivers.	Yes	Sometimes	No
9.	I use my cell phone to talk or text.	Yes	Sometimes	No
10.	I need to brake hard or swerve when driving normally.	Yes	Sometimes	No
11.	I am in a hurry when I drive.	Yes	Sometimes	No
12.	My friends crash and get tickets.	Yes	Sometimes	No

### Discussion point

Anything but a Yes on 1-7 and a No on 8-12 may indicate a less than ideal emotional commitment to safety. Agree or disagree? Why?

Rider Self-Assessment Wall Chart....

**Emotional Commitment to Safety?** 

### Section 12. Select Topics

- 1. How does a person earn a motorcycle license?
- 2. What personal riding gear is required for riding?
- 3. What are the state requirements for motorcycles?
- 4. What is the minimum insurance requirement?
- 5. What are the consequences of a DWI conviction?

### Fatal Vision<sup>®</sup> Simulation Goggles

Follow RiderCoach Instructions

Conclusion Alcohol affects behavior and harms the ability to Search-Evaluate-Execute.



## Activity 8. Safe Riding vs Risky Riding

### Seventeen Riding Behaviors

# Conclusion

It is often easy to

figure out what is

risky and what is

safe.



### SAFE RIDING VERSUS RISKY RIDING

In some ways, we have a voice that informs us as to what is safe and what is not. For each of the motorcycle riding behaviors below, place in the space provided an **S** for the safety-related voice or an **R** for the risk-related voice.

- 1. \_\_\_\_\_ Take a curve at the suggested advisory speed.
- Keep up with faster-riding friends in curves.
- Ride at the speed limit on a freeway.
- 4. \_\_\_\_\_ Stop beyond the stop line at an urban intersection.
- Aggressively challenge a decreasing radius curve.
- 6. \_\_\_\_\_ Ride at 72 mph on a freeway where speed limit is 65 mph.
- 7. \_\_\_\_\_ Honk at a driver who cuts you off in traffic.
- Use a following distance of less than two seconds.
- 9. \_\_\_\_\_ Pass in a no-passing zone.
- 10. \_\_\_\_\_ Ride at a speed where traffic builds up behind you.
- Ride past a blind intersection without slowing.
- 12. \_\_\_\_\_ Use turn signals for turns and lane changes.
- Roll through a stop sign.
- 14. \_\_\_\_\_ Use high beams when an oncoming driver doesn't dim theirs.
- Park in a handicapped parking space.
- Use the street like a personal race track.
  - 17. \_\_\_\_\_ Ride while thinking about work issues.

We become what we think about, and what we think about is shown by our behavior. Although there may be no specific answer for the voice that dominates in the above behaviors, a rider likely knows the difference between proper and improper choices.

### Activity 9. Key Safety Concepts

### Six Curves, Turns & Intersections









### KEY SAFETY CONCEPTS

### Situational Awareness 1: Curve

Group 1: What key factors could interact to form a collision trap or provide an escape path? Group 2: In what way do the 2-4-12 second visual leads apply? Group 3: How does search-setup-smooth apply?

### Situational Awareness 2: Sharp Turn

Group 2: What key factors could interact to form a collision trap or provide an escape path? Group 3: In what way do the 2-4-12 second visual leads apply? Group 1: How does search-setup-smooth apply?

### Situational Awareness 3: Curve

Group 3: What key factors could interact to form a collision trap or provide an escape path? Group 1: In what way do the 2-4-12 second visual leads apply? Group 2: How does search-setup-smooth apply?

### Situational Awareness 4: Intersection

Group 1: What key factors could interact to form a collision trap or provide an escape path? Group 2: In what way do the 2-4-12 second visual leads apply? Group 3: How much of a time-and-space safety margin exists?

### Situational Awareness 5: Intersection

Group 2: What key factors could interact to form a collision trap or provide an escape path? Group 3: In what way do the 2-4-12 second visual leads apply? Group 1: How much of a time-and-space safety margin exists?

### Situational Awareness 6: Curve

Group 3: What key factors could interact to form a collision trap or provide an escape path? Group 1: In what way do the 2-4-12 second visual leads apply? Group 2: How does search-setup-smooth apply?

TRAFFIC CONTROLS & ROADWAY FEATURES ROADWAY USERS SURFACE CONDITIONS ESCAPE PATHS

### Activity 9. Key Safety Concepts

Six Curves, Turns & Intersections



KEY SAFETY CONCEPTS

A-9

1. Reinforces interaction of factors.

- 2. Emphasizes 2-4-12 second eye lead times.
- 3. Reinforces strategies for intersections & curves.
- 4. Provides more examples of traps and escape paths.

### Situational Awareness 1



### Situational Awareness 2



### Situational Awareness 3



Conclusion Our executive function, what we make our brain value, can have us stay alert and SEE for Safety on every ride.

### Activity 10. Values, Judgment, and Choices

Nine riding behaviors: <u>Why</u> riders do or don't do them



VALUES, JUDGMENT, AND CHOICES

A-10

Directions: For each behavior, note some reasons for a rider's choice. Then complete the statement in the last column.



### **Central Thread of MSF RETS**

### Human Factors: Transcending Simple Skills Training

Personality – Attitude – Perception – Motivation Attention – Knowledge – Skill – Judgment – Values

- What is the primary cause of rider crashes?
   Interaction of factors
- 2. What is a good rider?
  - One who reduces contributing factors
- 3. How does a good rider reduce factors?
  - Applies a strategy: S.E.E. (Search-Evaluate-Execute)
- 4. How long does it take to reduce risk?
  - It's a decision away!

5. What is the primary challenge to be safe and responsible?

• Self-control: Choosing to have plenty of good risk offset and being mindful of collision traps

### **Central Thread of MSF RETS**

### Human Factors: Transcending Simple Skills Training

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- 2. What is a good rider?
  - One who reduces contributing factors
- 3. How does a good rider reduce factors?
  Applies a strategy: S.E.E. (Search-Evaluate-Execute)

# **1-3: Perception**

### **Central Thread of MSF RETS**

### Human Factors: Transcending Simple Skills Training

Personality – Attitude – Perception – Motivation Attention – Knowledge – Skill – Judgment – Values

# **4-5: Executive Function**

4. How long does it take to reduce risk?

It's a decision away!

5. What is the primary challenge to be safe and responsible?

• Self-control: Choosing to have plenty of good risk offset and being mindful of collision traps

# **Session Goals**

### 1. Overview

- **2. Historical Perspective**
- 3. Developmental Underpinnings
- 4. Content of Basic RiderCourses
  - Level I Basic
  - Level II Behavioral
  - Riding Exercises