#### **Training Package**

**TP 17/15** 

# Eliminate/Avoid Hazards with Two Wheeler Riders on the Road



# Eliminate/Avoid Hazards with Two Wheeler Riders on the Road

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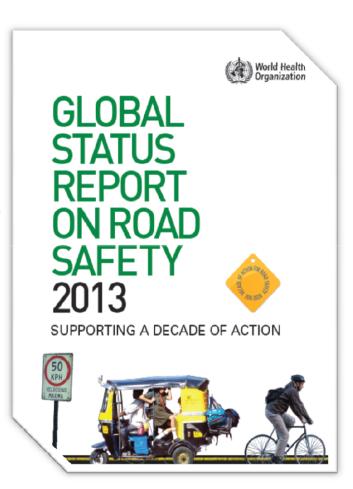
#### **Purpose**

To make product vehicle drivers understand the characteristics & dynamics of two wheelers and how to save two wheeler riders on the road. This is also to make product vehicle drivers aware of the DOs and DON'Ts on the road when they may drive a two wheeler after duty hours.

- Facts and Statistics
- Characteristics of two wheelers
- Dynamics of two wheeler accidents
- Saving the two wheeler riders
- Characteristics of a good driver
- When you are a two wheeler rider after duty

#### **Facts and Statistics**

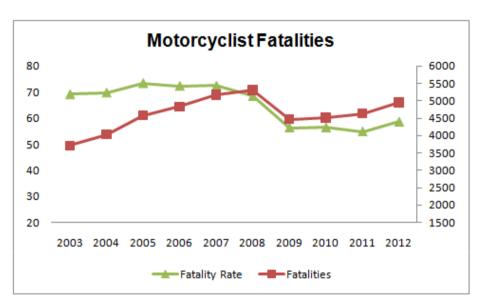
- About **1.24 million people** die each year as a result of road traffic crashes, remaining unacceptably high
- 91% of the world's fatalities on the roads occur in lowincome and middle-income countries, even though these countries have approximately half of the world's vehicles
- Half of those dying on the world's roads are "vulnerable road users": pedestrians, cyclists and motorcyclists
- Without action, road traffic crashes are predicted to result in the deaths of around 1.9 million people annually by 2020
- Only 28 countries, representing 416 million people (7% of the world's population), have adequate laws that address all five risk factors (speed, drink-driving, helmets, seat-belts and child restraints)

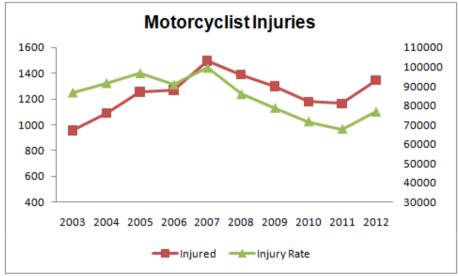


# **Facts and Statistics**

- Around three fourths of the two wheeler accidents involve collisions with automobiles
- Two thirds of these accidents were caused by the motorist failing to yield the right of way
- 40% of two wheeler accidents occur at intersections
- Regarding accidents between a truck / tanker and a two wheeler
  - ➤ The most common reason given by the truck / tanker driver involved in these accidents is "I didn't see the two wheeler"
  - ➤ The most accidents occur when the truck / tanker driver is taking a turn in front of a two wheeler

#### **Facts and Statistics**





Rate: per 100,000 registered vehicles





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#### Two wheeler characteristics

- Low visibility to other vehicles because of its shape and size and also due to drivers of larger vehicles having visual set
- Can easily loose control and skid
- Will suddenly brake without any notice
- Can loose control due to wobbling of the front wheel due to mechanical failure / wheel imbalance
- Can have a tire blowout at high speed, resulting in loss of steering control

#### Two wheeler characteristics

- Two wheelers are more affected by bad weather such as rain, strong winds and etc
- Can loose steering control due to strong winds especially on highways
- Poor road surfaces can cause the two wheeler to loose control over its movement
- Pillion passengers are as much part of the ride as the rider. They can work with you or against you
- Two wheelers do not have protective exteriors and therefore the riders are more vulnerable
- Even with proper clothing and accessories, riders are still at a higher risk of injury



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# **Dynamics of two wheeler accidents**

- Intersections are the most likely place for a motorcycle accident
- The typical motorcycle accident allows the rider just less than 2 seconds to complete all collision avoidance action
- Two wheeler riders are often self taught and are without formal training
- A lot of motorcyclists involved in accidents are without licenses / suspended licenses

#### **Dynamics of two wheeler accidents**

- The likelihood of injury is extremely high in all two wheeler accidents
- The most deadly injuries to the two wheeler are to the chest and the head
- In most of the two wheeler accidents a pillion passenger is also involved
- From the prospective of truck / tanker driver involved in accident with two wheeler
  - ➤ Truck / tanker drivers are generally unfamiliar with two wheeler dynamics
  - ➤ Heavy vehicle drivers tend to look for and see the familiar things other trucks / tankers / heavy vehicles
  - Two wheelers have a much smaller profile than a large vehicle, therefore judging the speed and distance of an approaching two wheeler is more difficult



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#### Saving the two wheeler riders

- Never take the two wheeler movement for granted
- Never presume that the two wheeler driver will do something unless you are certain of his movements
- Do not trust your mirrors because a two wheeler can be hidden in your blind spot
- Expect to see a two wheeler from nowhere!
- Remember a two wheeler can easily skid and hit your vehicle
- Respect two wheelers carrying children / ladies as pillion riders
- Remember that the person underneath that helmet could be someone you know!
- Be cautious for the overloading two wheelers with many pillion passenger or goods



#### Saving the two wheeler riders

- Plan ahead and proceed through intersections with extreme caution
- Don't follow a two wheeler too closely. Give the two wheeler the same or even more space and respect that is normally given to a truck / tanker
- Be cautious to drive following a two wheeler without front / rear light working at night
- Watch out for the sudden brake lights of a two wheeler in front of you
- Do not tail gate a two wheeler one small touch with your vehicle can throw the two wheeler off balance!
- Do not forget that the two wheeler is entitled to the whole lane of traffic and not just a part
- Watch out for the younger two wheeler rider
- Watch out for the two wheeler riders racing in a group / horse playing



#### Saving the two wheeler riders

- Try to avoid drive knowingly with a two wheeler on side by side of your vehicles because he will or can overtake and be in front of you any time
- Let the aggressive two wheeler get ahead of you create as much space as possible between you and him
- When allowing a two wheeler to overtake your vehicle, allow him sufficient space and time to overtake you safely – Don't speed up when it is overtaking you
- Avoid Head On Collisions! When faced with an oncoming two wheeler you MUST dim your headlights
- Do not sound the air horn very close to the two wheeler from behind this will startle him and make him loose balance and skid
- Be courteous signal your intentions well in advance Make sure they see you!
- Never cut in too closely after overtaking a two wheeler



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# Some characteristics of a good driver

- Pride in the profession
- Desire to improve driving skills
- Drive with knowledge
- Be alert
- Have foresight
- Demonstrate sense of judgment

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- Practice the Defensive Driving requirement
  - > Aim High In Steering
  - Get The Big Picture
  - Keep Your Eyes Moving
  - Leave Yourself An Out
  - Make Sure They See You

#### Aim High In Steering



Look ahead a minimum of 15 seconds

#### Get the Big Picture



View 180 degree & Scan mirrors every 5-8 seconds

Keep Your Eyes Moving



Avoid focusing on any one object for more than 2 seconds



#### Leave Yourself an Out



Make Sure they See You



Use horn, lights & hand signals; Eye contact .. for safety

- Ensure working lights / horns / brakes / tire pressure etc. Make sure it:
  - > Feel right
  - Handle right
  - Sound right
- Ask pillion rider to sit astride better balance
- Be alert for blind spots
- Dress for safe driving
- Be very alert while crossing intersections
- Use turn signals well in advance

- Don't make the turn abruptly
- Do not honk unnecessarily
- Do not brake suddenly
- Do not show road rage
- Do not drive fatigued / under the influence of alcohol or drugs
- Do not use cell phones while riding
- Use Proper Helmet! It can save your life!

# **Reference**

- Global Status Report On Road Safety 2013 (World Health Organization)
- Traffic Safety Facts 2012 Data (U.S. DOT, National Highway Traffic Safety Administration)