





BRAZIL
CAMBODIA
CHINA
EGYPT
INDIA
KENYA
MEXICO
RUSSIAN FEDERATION
TURKEY

**VIET NAM** 

In 2010, a consortium of partners received funding from Bloomberg Philanthropies to conduct activities that would improve road safety in 10 low- and middle-income countries over five years (2010–2014).

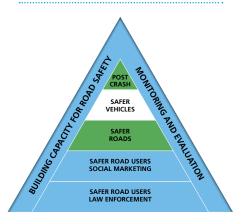
Called the Road Safety in 10 Countries Project – or RS10 for short – this initiative is being conducted in Brazil, Cambodia, China, Egypt, India, Kenya, Mexico, Russian Federation, Turkey and Viet Nam. The overall goal of the RS10 Project is to support the governments in the 10 project countries to implement good practices in road safety in line with their national road safety strategies. At least two risk factors were identified as priorities in each country.

Country	Road safety prever	ntion work	Trauma care	Data systems		
	Motorcycle helmets	Seat-belts & child restraints	Drink–driving	Speed management		
Brazil			✓	✓		
Cambodia	✓		✓			
China			✓	✓		
Egypt		✓		✓		✓
India	✓		✓	✓	✓	
Kenya	✓			✓	✓	✓
Mexico		✓	✓			
Russian Federation		✓		✓		
Turkey		✓		✓		
Viet Nam	✓		✓			

Project activities include: improving the safety of road users through the modification and enforcement of road safety laws combined with social marketing and public relation activities; building capacity among the police force and public health officials to enforce, implement and monitor the impact of the project; and finally to address issues of post-crash services and improving data collection in selected countries. Improving roads and mobility though infrastructural enhancements in selected countries is being conducted in parallel through projects lead by the World Bank and EMBARQ. Improving vehicle safety is not being addressed through the project.

The project has now been running for just over two years and countries are at various stages of implementation. Most countries have implemented enhanced enforcement activities supported by the Global Road Safety Partnership (GRSP) dovetailed with targeted social marketing campaigns (lead by WHO) and involving civil society (supported by ASIRT). Through baseline measurements and the monitoring of intermediate and outcome indicators, Johns Hopkins International Injury Research Unit (IIRU) are beginning to show the impact of interventions implemented by national and international partners in the project.

# THE RS10 MODEL TO IMPROVE ROAD SAFETY









#### **BRAZIL PROFILE**

POPULATION (2010): 194.9 million

**INCOME GROUP (2010):** Middle

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009): 18.3

NUMBER OF REGISTERED VEHICLES:

64.8 million

#### **HEADED IN THE RIGHT DIRECTION**

In 2011, two important legal developments helped to make Brazil's roads safer. A Bill being negotiated will strengthen the drink–driving

law, while in November, the National Traffic Council made the decision to allow traffic agencies to conduct more covert speed enforcement. The Brazilian government has also committed more than US\$ 6.5 million to extend *Vida No Trânsito*.

#### THE WAY FORWARD

In 2012 and 2013, RS10, or *Vida No Trânsito* as it is known in Brazil, will work with federal and city government

partners and engage with key agencies in five capital cities to reduce vehicle speeds and drink–driving. The approach involves comprehensive enforcement, low-cost engineering measures, education and social-marketing campaigns.

#### **BRAZIL'S BOOMING ROADS**

As Brazil's economy expands, the use of motorized transport has risen dramatically. There are nearly 50 million registered vehicles within the country; of which motorcars and motorized 2- and 3-wheelers constitute a sizable proportion (61% and 22% respectively). As a result, more lives are being lost and more injuries are being sustained in road traffic crashes. In 2006 there were in excess of 400 000 reported non-fatal road traffic injuries leading to more

than 35 000 road traffic fatalities. Of these fatalities, 28% occurred among pedestrians.

Vida No Trânsito seeks to reduce these risks and save lives with comprehensive and targeted approaches. In 2012 and 2013, these will focus on speeding and drink–driving – key contributing factors to crashes. The programme's activities are determined by the data gathered in the field from multiple sources. Also at

the national level, *Vida No Trânsito* will address drink–driving and provide scientific evidence of its risks to lawmakers. Promotion of draft legislation and amendments to the drink–driving laws that make the case for zero tolerance for drink–driving will be undertaken.

#### **RS10 IN FIVE CITIES:**

In Brazil, RS10, Vida No Trânsito is working in:

Belo Horizonte •

Campo Grande •

Curitiba •

Palmas

Teresina

These five cities combined account for almost 6 million people.



### **VIDA NO TRÂNSITO'S GOALS**

Reducing road traffic fatalities and serious injuries by between 3 and 10% in the five Brazilian cities participating in *Vida no Trânsito* is the goal for 2012–13.



- Reduce speed-related road crashes by advocating for implementation of laws to reduce travel speeds.
- Increase compliance with speed limits through social marketing campaigns, strategic and enhanced enforcement.
- > Monitor and evaluate the impact of interventions.



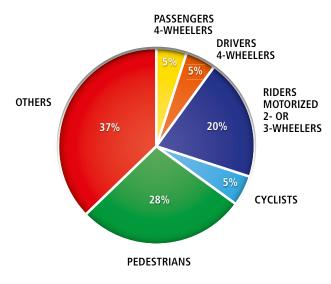
## **REDUCE SPEEDING THROUGH:**

- running social marketing campaigns on speed control;
- training journalists on how to cover speed as a risk factor and its prevention;
- purchasing and delivering speed monitoring equipment;
- building the capacity of traffic police to improve enforcement;
- improving enforcement of speed control by increasing use of speed cameras and radars; and
- helping local government to implement infrastructure speed control measures, including installation of roundabouts, elevated pedestrian crossings, signalling and traffic calming.

#### **REDUCE DRINK-DRIVING THROUGH:**

- running social marketing campaigns on drink-driving;
- conducting awareness raising campaigns on drink-driving in schools, communities, work places and selected public events;
- training journalists on how to cover drink-driving as a risk factor and its prevention;
- purchasing and delivering blood alcohol monitoring equipment; and
- building the capacity of traffic police to improve enforcement.

## **DEATHS BY ROAD USER CATEGORY**



Source: Ministry of Health Mortality Information System, 2006

#### **CONTACTS:**

WHO COUNTRY OFFICE: Roberto Colombo Email: colomboro@paho.org

- Ministries of Health, Cities, Transport and Justice
- The President's Chief of Staff of the Republic
- Human Rights Secretariat of the President of the Republic
- National Drug Enforcement Secretariat
- National Youth Secretariat
- Municipal and State Health and Justice Secretariats
- Municipal and State Transport and Traffic Agencies







#### **CAMBODIA PROFILE**

POPULATION (2010):

14.1 million

INCOME GROUP (2010): Low

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009):

12.1

NUMBER OF REGISTERED VEHICLES (2010):

1.7 million

#### **HEADED IN THE RIGHT DIRECTION**

In late 2011, members of the RS10 team in Cambodia successfully advocated for road safety laws

requiring that children wear helmets when riding as passengers on motorcycles. This same legislation increased fines for road traffic violations by between 5 and 7%.

#### THE WAY FORWARD

In 2012 and 2013, RS10 will work in six provinces in Cambodia to address two key risk factors that contribute to road

traffic fatalities and injuries. Lives will be saved by increasing helmet use among motorcycle riders and passengers and by reducing the incidence of drink–driving.

## **LIVES AT RISK IN CAMBODIA**

In a country where the number of registered vehicles has increased by more than 140% over the past 5 years, the number of road traffic fatalities has doubled during the same period of time.

In Cambodia, road traffic crashes kill more than 1700 people each year, with more than 60% of those deaths involving riders of motorized twoand three-wheeled vehicles. Threequarters of these motorbike fatalities are a result of serious head injuries. In 2009 Cambodia increased the enforcement of existing traffic laws, including the law requiring motorcycle riders to wear helmets. In 2011 the helmet wearing rates were 50% during the day (among drivers and passengers in Phnom Penh, Kandal, and Kampong Speu), but helmet wearing among drivers during hours of darkness was lower for both drivers and passengers of motorcycles. A goal of the RS10 programme in Cambodia is to increase helmet-wearing rates overall, with a special focus on night time wearing.

#### **RS10 IN SIX PROVINCES:**

In Cambodia, RS10 is working in:

Battambang

Kampong Cham •

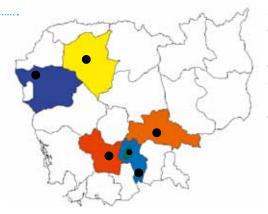
Kampong Speu

Kandal

Phnom Penh

Siem Reap

The combined population of these focus provinces is around 6.3 million.



#### **RS10 CAMBODIA'S GOALS**

The goal of RS10 Cambodia in 2012–13 is to increase helmet-wearing through enhanced enforcement, social marketing and legislative action as well as to reduce drink–driving through increasing user's knowledge and enhancing enforcement of laws.



- Enhanced enforcement of existing laws.
- Social marketing and awareness raising among target populations.
- > Improved advocacy, legislation and regulations in relation to helmet wearing and helmet standards.
- Improved capacity of the National Road Safety Committee (NRSC) to effectively manage road safety.

#### **INCREASE HELMET WEARING THROUGH:**

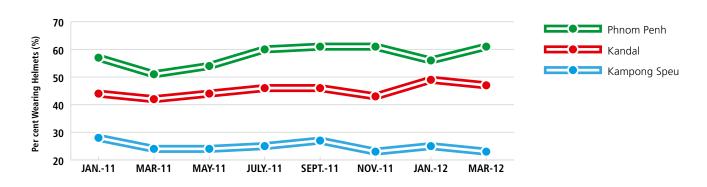
- > building police capacity to enforce helmet-wearing and implementing helmet checkpoints;
- > changing motorcycle rider and passenger behaviour through a social marketing campaign that highlights the consequences of not wearing helmets;

- advocating for and supporting the development of legislation that includes mandatory helmet use for passengers; and
- > increasing public awareness about Cambodia's new passenger helmet law.

#### **REDUCE DRINK-DRIVING THROUGH:**

- > building police capacity to enforce drink-driving laws;
- distributing breathalyzers where they can make the most significant difference;
- implementing standard checkpoint operating procedures;
- > implementing social marketing messages and improving drink-driving advertisements;
- > training journalists to report on road safety, not just road traffic crashes; and
- > engaging local nongovernmental organizations to advocate for legislation changes.

# **OVERALL (DAY-TIME AND NIGHT-TIME) MOTORCYCLE HELMET USE IN SELECT** DISTRICTS, KAMPONG SPEU, KANDAL AND PHNOM PENH, CAMBODIA, 2011-2012



Source: Johns Hopkins International Injury Research Unit and Handicap International Belgium; unpublished data

#### **CONTACTS:**

WHO COUNTRY OFFICE: Steve Iddings Email: iddingss@who.int

- National Road Safety Committee
- Ministry of Health
- Ministry of Public Works and Transport
- Ministry of Education, Youth and Sport
- Phnom Penh Municipal Police
- Handicap International Belgium
- Cambodia Red Cross







#### **CHINA PROFILE**

POPULATION (2010):

1.3 billion

**INCOME GROUP (2010):** 

Medium

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009):

16.5

NUMBER OF REGISTERED VEHICLES (2009):

207.1 million

#### THE ROAD AHEAD

In 2012 and 2013, RS10 will work in two cities in China – Dalian and Suzhou – to reduce road traffic injuries and fatalities, increase the enforcement of existing laws and advocate for stronger legislation on both drink–driving and speeding. Assessing the impact of electric bikes or E-bikes will also be undertaken.

#### **HEADED IN THE RIGHT DIRECTION**

In May 2011, as part of activities to recognize the beginning of the Decade of Action for Road Safety, the Chinese government passed a new law criminalizing drink–driving. In Dalian, the local government has changed

speeding regulations related to penalties and are currently amending their insurance laws. Suzhou will develop appropriate laws for E-bikes as currently none exist. Social marketing efforts, coupled with demonstrated impact through better enforcement, has led the government to invest nearly 2.2 million RMB (US\$ 350 000) to support future activities.

#### SAFE ROADS IN A CHANGING CHINA

In today's China, where urbanization and rates of vehicle ownership continue to rise dramatically, hundreds of thousands of people lose their lives each year due to road traffic crashes. Injuries to drivers, passengers and pedestrians remain the leading causes of death for people between 14 and 44 years of age. In rural areas, riders of motorbikes

and bicycles also find themselves at risk of injury and death on unsafe roadways. The growth in the use of E-bikes is an emerging road safety issue.

Road safety throughout China will involve a systematic approach involving all relevant factors – the environment, the vehicle, and the users. Focusing on

the user – significant improvements will be gained by increasing public awareness of risks, advocating for appropriate legislation and supporting local efforts to better enforce existing laws. RS10 will work to make the roads safer for users in two cities by supporting these aspects of road safety.

# RS10 IN TWO GROWING CITIES:

In China, RS10 is focusing its 2012 and 2013 efforts on making a difference in Dalian, which has more than 6 million people, and Suzhou, which has more than 10 million people.



#### **RS10 CHINA'S GOAL**

The goal of RS10 in China during 2012–13 is to reduce travel speeds and drink–driving through targeted enforcement, increased penalties, and public awareness and improve the laws that save lives and protect vulnerable road users.



- > Enhanced enforcement of existing laws through the provisions of appropriate equipment and training.
- Increased awareness of risk factors among target populations through social marketing activities.
- Developed new laws to protect E-bike users.
- Monitor and evaluate the impact of interventions in comparison to baseline assessments.

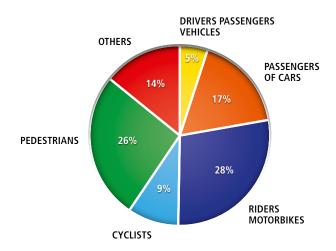
#### **REDUCE SPEEDING THROUGH:**

- purchasing and deploying additional speed cameras in Dalian;
- improving routine enforcement skills and provide trainthe-trainer programmes on road safety risk factors; and
- conducting and reporting on roadside observations and surveys on speeding.
- hosting advocacy events with local nongovernmental organizations;
- > assessing the problem of E-bikes and speed through:
  - > collection of hospital-based data and police data; and
  - the development of appropriate legislation to address the issue.

#### **REDUCE DRINK-DRIVING THROUGH:**

- > purchasing and deploying additional breathalyzers;
- limproving police enforcement techniques through training and mentoring;
- rolling out a social marketing campaign on the risks of drink-driving;
- > facilitating legislative roundtables on road safety reform; and
- hosting advocacy events with local nongovernmental organizations that encourage stronger drink-driving laws and penalties.

#### **DEATHS BY ROAD USER CATEGORY**



Source: Traffic Management Bureau of the Ministry of Public Security

#### CONTACTS:

WHO COUNTRY OFFICE: Brent Powis Email: powisb@wpro.who.int

- Ministry of Health
- Ministry of Transport
- Chinese Center for Disease Control and Prevention
- Dalian and Suzhou Municipal Governments





# ROAD SAFETY IN TEN COUNTRIES



#### **EGYPT PROFILE**

POPULATION (2010):

81.1 million

**INCOME GROUP (2010):** Middle

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009):

41.6

NUMBER OF REGISTERED VEHICLES (2010):

5.8 million

#### THE ROAD AHEAD

In 2012 and 2013, RS10 will continue to work in two cities in Egypt to raise public awareness and to strengthen enforcement to reduce travel speed and to increase seat-belt use. Improving road traffic injury and data systems is also a key focus.

#### **HEADED IN THE RIGHT DIRECTION**

In 2012, eight new speed cameras were installed on Cairo's heavily traveled "ring road" and preliminary data shows that average speeds have been reduced and more fines have been issued. Engagement of nongovernmental organizations has helped increase public awareness of the risks of speeding.

To improve road safety data in Egypt, the RS10 team has reviewed existing data-gathering systems and forms, amended them and introduced improved versions into hospitals. In addition, RS10 will link up with the MoVE-IT programme to improve vital registration completeness and coverage in the country.

#### **SPEED AND RISK IN EGYPT**

Traffic in Egypt is a fast-moving combination of trucks, buses, cars, motorcycles and pedestrians, all of which share the same infrastructure. The result is that there are more than 12 000 fatalities each year from road traffic crashes. Thousands more are injured, some suffering long-term life-changing

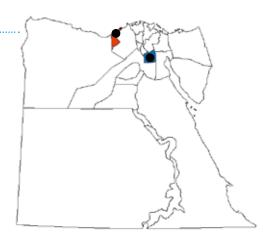
disabilities as a result. Almost half of all road crash victims are drivers or passengers of cars, while one-fifth are pedestrians.

While laws do exist concerning speed as well as drink–driving and seat-belt and helmet use, some amendments

have been proposed and the laws are not visibly enforced. Enhanced enforcement, coupled with greater public visibility and awareness, will make Egypt's roads a safer place. RS10 will take advantage of the new governmental structure in the country to push road safety as a winnable battle.

### **RS10 IN TWO CITIES:**

In Egypt, RS10 is working in Cairo and Alexandria which have a combined population of around 13.4 million people.



# **RS10 EGYPT'S GOALS**

In a recent knowledge and attitudes survey, 75% of respondents did not understand the importance of wearing seat-belts, and most said they would have little impact in urban areas due to vehicle density and congestion. The goal in 2012–13 will be to change perceptions on seat-belt wearing and speeding through appropriate public awareness.



- > Raise public awareness of speeding and seat-belt wearing.
- Improve speed enforcement and strengthening penalties for non-compliance.
- > Work with civil society to advocate for road safety.
- > Improve health and police data systems.



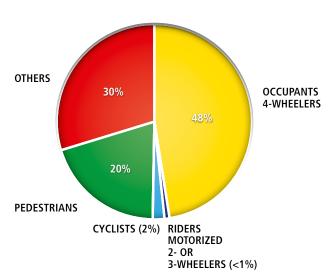
# RAISE PUBLIC AWARENESS ON SEAT-BELT WEARING THROUGH:

- > implementing public awareness campaigns;
- training journalists and working with them to disseminate information through print media and radio;
- organizing round-table media events with experts, academics, policy-makers to advocate for road safety initiatives;
- disseminating evidence of impacts and results through scientific publications; and
- collaborating with nongovernmental organizations to disseminate key road safety messages at the local level.

### **REDUCE SPEEDING THROUGH:**

- installing speed cameras and training police on how to use them;
- briefing policy-makers on legislative reviews and recommendations for improved laws; and
- enlisting the help of nongovernmental organizations to help influence the Government to make required legislative changes.

#### **DEATHS BY ROAD USER CATEGORY**



Source: National Information Center for Health & Population, 2005

#### **CONTACTS:**

WHO COUNTRY OFFICE: Naeema Al-Gasseer Email: algasseern@who.int

- Ministry of Health
- Traffic Police
- General Authority for Roads,
   Bridges and Land Transport
- Egyptian Red Crescent
- Egyptian Society for Road Safety
- Union for Road Traffic Injuries
- Central Agency for Public
   Mobilization and Statistics







#### **INDIA PROFILE**

POPULATION (2010):

1.2 billion

**INCOME GROUP (2010):** Middle

ROAD TRAFFIC DEATHS PER 100 000 (2009):

16.8

NUMBER OF REGISTERED VEHICLES (2009):

114.9 million

#### **HEADED IN THE RIGHT DIRECTION**

A high-profile social marketing campaign on drink-driving showed promising results when it was aired in

Jalandhar and Hyderabad in December 2011. This campaign, combined with enhanced enforcement, will be rerun

and it is expected the combined effect of education and enforcement will have a much stronger effect.

#### THE ROAD AHEAD

In 2012 and 2013, RS10 will work to consolidate gains in India in the fight against drink–driving while also working to increase the rates of helmet usage in Andhra Pradesh and reduce the deaths caused by speeding in Punjab. Coverage is being extended beyond Hyderabad to the greater Cyberabad area.

#### **GROWING PAINS IN A CROWDED COUNTRY**

India's roads are a dangerous mix of high-speed cars, run-down vehicles, inadequate infrastructure, unskilled drivers and other vulnerable road users. This mix contributes to the tragic loss of more than 100 000 people a year, with additional hundreds of thousands more being injured.

The rise in road traffic crashes over the last 40 years has resulted from the country's rapid motorization. In 2009, there were nearly 115 million registered vehicles on India's roads, many being motorbikes and "rick-shaws or autorickshaws" – inexpensive motorized three-wheelers that are a popular form of transportation. A third of all crashes affect those driving two-and three-wheelers, resulting in many fatal or serious head injuries. While helmet laws do exist to protect riders' heads from such collisions, wearing rates are still extremely low. Speeding is also a significant risk factor.

Alcohol contributes to many road traffic collisions in India, particularly at night. A combination of random breathalyzer testing and public awareness would go far in saving lives. RS10 is making good use of all forms of media and social marketing campaigns to increase awareness of the dangers of drink–driving and speeding and the benefits of wearing helmets.

#### **RS10 IN TWO STATES:**

In India, RS10 is focusing its 2012 and 2013 efforts on making a difference in Hyderbad/Cyberabad in the state of Andhra Pradesh and Jalandhar in the state of Punjab. These three areas combined account for nearly 9 million inhabitants.



#### **RS10 INDIA GOAL**

The goal in India in 2012–13 is to reduce drink–driving in both States and begin work in the areas or speed reduction in the Punjab and increasing motorcycle helmet wearing rates in Andhra Pradesh.



- > Strengthen the capacity of partners to develop and implement mass-media social marketing campaigns.
- Increase the knowledge and skills of traffic police for strategic, intelligence-driven enforcement.
- Support long-term, random and enhanced enforcement through the use of project-procured breathalyzers and speed radar equipment.
- Monitor and evaluate the impact of interventions compared to baseline assessments.

#### **REDUCE DRINK-DRIVING THROUGH:**

- adapting and rerunning the successful drink-driving social marketing campaign;
- increasing the capacity of traffic police to effectively enforce drink-driving laws;
- coordinating social marketing campaigns with enhanced police enforcement;
- advocating for legislative change on alcohol sales and use;
- > purchasing and deploying additional breathalyzers; and
- training journalists to support advocacy efforts.

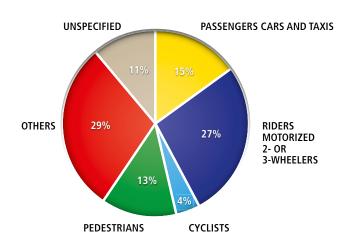
#### **INCREASE HELMET USAGE THROUGH:**

- encouraging stronger enforcement of helmet-wearing laws;
- conducting a social marketing campaign to raise awareness of the benefits of wearing helmets and the risks and penalties of non-compliance; and
- enlisting the support of nongovernmental organizations in all activity areas.

#### **REDUCE SPEEDING THROUGH:**

- running social marketing campaigns that address the issue of speeding;
- increasing the capacity of traffic police to effectively enforce speed-related laws;
- coordinating social marketing campaigns with enhanced police enforcement;
- assisting in data collection on speeding;
- purchasing speed detection equipment for use by the police and improve speed limit road signs;
- > training journalists to help support advocacy efforts; and
- > enlisting the support of NGOs.

#### **DEATHS BY ROAD USER CATEGORY**



Source: Road Accidents in India 2006. Ministry of Shipping, Road Transport and Highways

#### **CONTACTS:**

WHO COUNTRY OFFICE: Sverker Almqvist Email: almqvists@searo.who.int

- Ministry of Health and Family Welfare
- Ministry of Surface Transport
- Joint Commissioner of Traffic Police, Hyderabad & Jalandhar
- National Highway Authority of India





# **Notable Improvements in RS10 Countries**

#### **KENYA**

Introduction of speed cameras, greater enforcement result in reductions in travel speeds.

Progression of amendments to Kenya Traffic Act.

#### **EGYPT**

Reductions in speed as a result of newly installed speed cameras and through raising public awareness.

### **TURKEY**

Rates of seat-belt use by drivers up over 50% in Afyonkarahisar as a result of targeted enforcement, social marketing and increased political will.

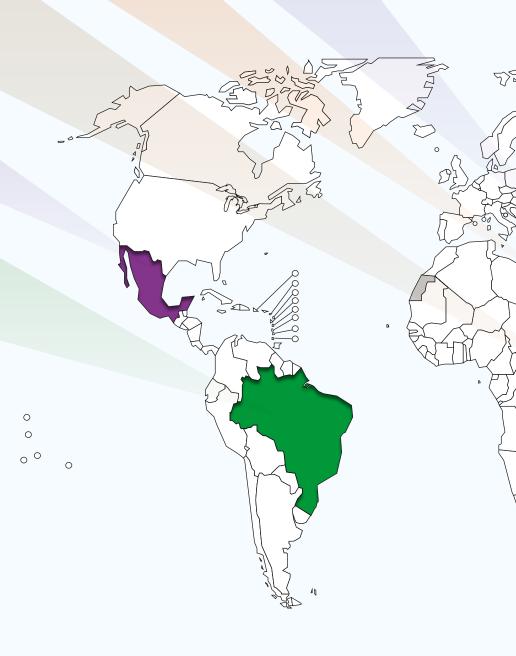
#### **MEXICO**

Amendments made to blood alcohol content (BAC) legislation.

#### **BRAZIL**

Government funded expansion to 22 additional cities.

New legislation allowing for covert speed enforcement.



#### **RUSSIAN FEDERATION**

Rates of seat-belt use now above 70%.

Reductions in travel speed in Lipetsk.

#### **CHINA**

Traffic laws concerning E-bikes being drafted.

Additional government funding and investment in road safety.

Improved regulations and increased penalties for speeding.

#### **INDIA**

Social marketing campaign reached over 50% of the target population and documented behaviour change.

Hyderabad traffic police increased enforcement and penalties for drink–driving plus introduced re-education programmes for offenders.

#### **VIET NAM**

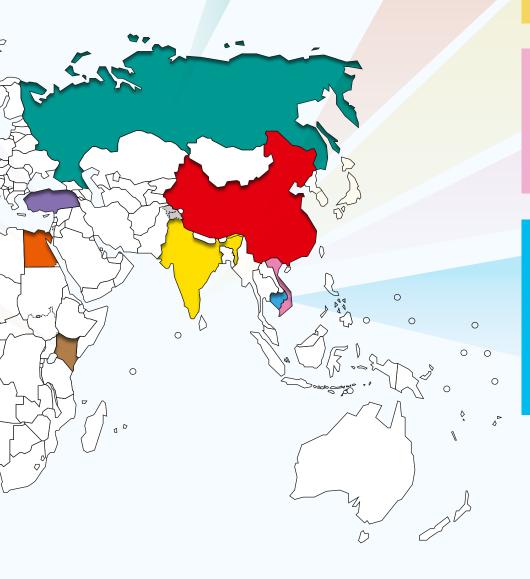
Rates of helmet wearing now above 90%.

Loopholes closed in helmet and blood alcohol content (BAC) legislation.

## **CAMBODIA**

Increases in helmet wearing rates to 47% usage among drivers and 33% among passengers.

Advocacy campaigns pushing changes in law in relation to passenger helmet wearing.







# ROAD SAFETY IN TEN COUNTRIES



#### **KENYA PROFILE**

**POPULATION (2010):** 40.5 million

INCOME GROUP (2010):

Low

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009):

34.4

NUMBER OF REGISTERED VEHICLES (2009):

1.4 million

#### THE ROAD AHEAD

In 2012 and 2013, RS10 Kenya will build on its work in two cities (Thika and Naivaisha) to decrease speed-related crashes, injuries and deaths,

particularly around schools. It will also work towards increasing the overall rate of helmet usage by 50% and focus particular attention to motorcycle taxi riders known locally as boda-boda riders.

#### **HEADED IN THE RIGHT DIRECTION**

Speed-detection cameras were installed in Thika and Naivasha in April 2011. These, along with visible policing, have led to fewer crashes and fatalities and more fines. The results have encouraged the government to purchase additional cameras for use throughout the country. Life-saving equipment has also been delivered to hospitals, including two new ambulances, and data systems are being improved in health facilities.

#### PROTECTING THE MOST VULNERABLE ON THE ROADS IN KENYA

The number of people killed on Kenya's roads has been steadily rising over the last 40 years. The majority of those killed are vulnerable road users – pedestrians, bicyclists and motorcyclists – and one of the main contributing factors is speed. The main highways that pass through Thika and Naivasha are particularly dangerous, with 80% of those arriving at hospitals in the area having sustained

their injuries on these roads.

There are a growing numbers of motor-cyclists on Kenyan roads. Many of the 180 000 motorcycles are used as taxis or *boda-bodas* – a risky and unsafe form of public transportation. Helmet wearing rates are very low and the quality of helmets is poor. One-third of those killed are passengers on motorcycles.

RS10 will address these issues by working to reduce deaths and injuries due to speed, particularly around schools, to increase rates of helmet usage and to raise Kenya's helmet standards to meet international standards.

#### **RS10 IN 2 DISTRICTS:**

In Kenya, RS10 is focusing its 2012 and 2013 efforts on making a difference in the districts of Thika in Central Province and Naivasha in the Rift Valley Province. The combined population for these two sites is approximately 1.2 million inhabitants.



#### **RS10 KENYA'S GOALS**

Speed is a serious factor in road fatalities and, by lowering it around schools and strictly enforcing current laws, RS10 will decrease the deaths, injuries and crashes it causes. As speed in areas where children gather is of particular concern, plans are in place to implement and monitor targeted safety activities near 20 schools in 2012. RS10 will revise helmet standards and aim to increase the rates of helmet usage up to at least 50% in Thika and Naiyasha.



- Increase the helmet wearing rates and decrease speeding through social marketing and enforcement.
- Revise national helmet standards to bring them in line with international standards.
- Engage civil society to advocate for comprehensive revision of Kenya's traffic laws.
- > Improve pre-hospital trauma care in project sites.
- > Improve health and police data systems in the country.

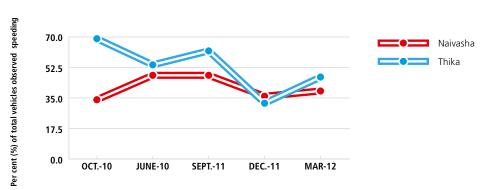
#### **INCREASE HELMET WEARING THROUGH:**

- running a national helmet-wearing social marketing campaign;
- working with journalists to increase coverage of helmet-related issues;
- supporting increased enforcement of helmet wearing, advocate for stronger enforcement of existing laws, and revise laws to include all riders and passengers; and
- working with the Kenya Bureau of Standards to revise helmet standards.

#### **REDUCE SPEEDS THROUGH:**

- developing or adapting existing speed social marketing campaigns for the local context;
- advocating for increased penalties for speeding violations and reduced speed limits around schools and built-up areas;
- working with journalists to increase coverage of road safety issues and with a focus on dangers of speeding; and
- implementing special projects around 20 schools which include speed reduction and:
  - > painting zebra crossings in roads around the schools;
  - supervising school crossings;
  - enforcing speed limits;
  - providing two additional speed cameras for police for use near schools in 2012;
  - implementing injury surveillance log books in schools; and
  - developing Ministry of Education road safety guidelines for use nationwide.

#### SPEEDING TRENDS IN THIKA AND NAIVASHA DISTRICTS, KENYA, 2010-2012



Source: Johns Hopkins International Injury Research Unit, Roless Media & Management Institute, and Ministry of Public Health and Sanitation, Kenya; unpublished data

#### **CONTACTS:**

# WHO COUNTRY OFFICE: Salim Chowdhury Email: chowdhurysm@who.int

- Ministry of Public Health
- Ministry of Medical Services
- Ministry of Transport
- Traffic Police

- Ministry of Education
- Kenya Red Cross Society
- ASIRT-Kenya
- Maseno University







#### **MEXICO PROFILE**

POPULATION (2010): 112.3 million

**INCOME GROUP (2010):** Middle

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009): 20.7

NUMBER OF REGISTERED VEHICLES (2009):

30.9 million

#### **HEADED IN THE RIGHT DIRECTION**

Sustained engagement with policymaking processes by the RS10 team in Mexico has led to the successful passage of new or amended road safety laws in León and Jalisco. These laws have included lowering blood alcohol content limits, increasing penalties for drink–driving and not using seat-belts or child restraints.

#### PROTECTING DRIVERS, PASSENGERS AND PEDESTRIANS IN MEXICO

More than 30 million vehicles can be found on Mexico's roadways and each year tens of thousands of lives are lost as people choose not to wear seat-belts or as drivers get behind the wheel after drinking alcohol. Most of those killed in road crashes are between the ages of 15 and 29 years and road deaths are

the single leading cause of death for 10 to 29 year olds.

Two-thirds of Mexico's vehicles are passenger vehicles, so it comes as no surprise that the majority of those killed – 68% – are occupants of four-wheeled vehicles or trucks but pedestrians

also account for 21% of all fatalities nationwide.

The RS10 project in Mexico – locally known as *IMESEVI6* – aims to reduce road traffic fatalities and serious injuries by addressing the issues of drink–driving and restraint system wearing.

#### THE ROAD AHEAD

In 2012 and 2013, RS10 will work in Mexico to reduce road traffic injuries and fatalities by increasing the enforcement of existing laws and advocating for stronger legislation on both drink–driving and restraint system usage. The project has been extended from two to six cities in the country.

#### **RS10 IN SIX CITIES:**

In Mexico, RS10 is focusing its 2012 and 2013 efforts on making a difference in:

Aguascalientes

. . .

Guadalajara

León •

Merida •

Tuxtla Gutierrez •

These six cities cover a population of around 6.7 million people.

#### **IMESEVI6'S GOALS**





- Gather baseline data on drink-driving and seat-belt wearing practices in the four new project sites.
- Strengthen the capacity of partners to develop and implement mass-media social marketing campaigns.
- Increase the knowledge and skills of traffic police for strategic, intelligence-driven enforcement and support long-term, random and enhanced enforcement.
- Establishing a "Citizen's Observatory" with nongovernmental organization assistance.
- Monitor and evaluate the impact of interventions.

#### **REDUCE DRINK-DRIVING THROUGH:**

- advocating for an increased number of alcohol checkpoints;
- building capacity of traffic police to undertake strategic enforcement of existing laws;
- developing and running a social marketing campaign on drink-driving;

- strengthening the Police Directors Network and increase skill-sharing among peers; and
- purchasing and deploying additional breathalyzers to new cities.

# SEAT-BELT AND CHILD RESTRAINT USAGE WILL BE INCREASED THROUGH:

- advocating for the implementation and enforcement of the seat-belt and child restraint law;
- building capacity of traffic police and provide a guidelines on effective seat-belt enforcement;
- purchasing and delivering child restraints to support awareness-raising and their correct use;
- adapting and expanding the "For love, buckle" campaign; and
- > training journalists to report on issues that promote behaviour change.

# SELF-REPORTED\* ATTITUDE CHANGES IN YOUTH AFTER EXPERIENCING RS10 ACTIVITIES, NOVEMBER 2011

Attitude change regarding dangers	Guadala	Guadalajara-Zapopan		León	
of drink-driving	Number	%	Number	%	
Attitude change after talk/lecture	222/390	56.9	344/607	56.7	
Attitude change after crash simulator	48/87	55.2	46/85	54.1	
Attitude change after alcohol goggle use	69/152	45.4	54/119	45.4	

<sup>\*</sup>Self-administered survey of a random sampling of 5114 youth.

**Source:** Fundación Entornos, A.C. and Johns Hopkins International Injury Research Unit; unpublished data

#### **CONTACTS:**

WHO/PAHO COUNTRY OFFICE: Roy Rojas Email: rojasroy@paho.org

- Federal Ministry of Health
- National Council for Injury Prevention
- State Councils for Injury Prevention
- State Ministries of Health,
   Public Security and Transit
- National Institute for Public Health
- Center for Sustainable Transport, Mexico Victimas de Violencia Vial and Reves del Volante
- Jóvenes Salvaguarda and Jóvenes AC
- State and Municipal Youth Institutes
  - State delegations of the Mexican Red Cross



# ROAD SAFETY IN TEN COUNTRIES



#### **RUSSIAN FEDERATION PROFILE**

**POPULATION (2010):** 142.9 million

**INCOME GROUP (2010):** Middle

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009):

25.2

NUMBER OF REGISTERED VEHICLES (2010):

45.7 million

#### **HEADED IN THE RIGHT DIRECTION**

In Lipetsk and Ivanovo, the combination of an ambitious social marketing campaign and increased enforcement efforts has led to very promising road safety results. RS10 efforts

have contributed to an increased seat-belt wearing rate of more than 70%.

#### THE ROAD AHEAD

In 2012 and 2013, RS10 will work to further increase rates of seatbelt wearing up to 85% in the two intervention sites, reduce speed and improve post-crash. Public relation activities around seat-belt wearing will

be undertaken in Sochi ahead of the 2014 Winter Olympic games.

#### **RUSSIAN ROADWAYS**

While the road safety situation in Russian Federation has been gradually improving, almost 28 000 people lost their lives in 2011 on the roads. These crashes come with an estimated socioeconomic cost of nearly 2% of Russia's Gross Domestic Product.

Young men find themselves at particularly high risk of dying in road traffic crashes, with statistics showing that

those between the ages of 16 and 39 years are most likely to lose their lives in road traffic crashes. Pedestrians are also extremely vulnerable, representing around 36% of road traffic deaths in the Russian Federation.

The Government of the Russian Federation has taken proactive steps to address these significant road safety challenges. In 2006, it introduced the Road Safety Improvement Federal Target Programme – a six-year plan to reduce nationwide road traffic deaths by 33% compared to 2004 baseline measures. The programme is also working to modernize road infrastructure, strengthen drink–driving and other related laws and change behaviours through effective social marketing campaigns.

#### **RS10 IN 2 OBLASTS:**

In Russia, RS10 is working in the *Oblasts*, or administrative districts, of **Lipetsk** and **Ivanovo**. These two oblasts account for a population of around 2.3 million people.



#### **RS10 RUSSIA'S GOALS**

The key focus in Russia is to increase seat-belt wearing rates and reduce speed through compliance with the law. As more people become compliant, less people will be injured or killed. In addition, the post-crash care response will be improved through appropriate training courses.



- Increase seat-belt wearing rates to 85% in Lipetsk and 80% in Ivanovo by the end of 2012.
- Increase compliance with speed limits by 17% in Lipetsk and 20% in Ivanovo by the end of 2012.
- Improve post-crash care in both Oblasts and to monitor impact of seat-belt use on injury severity.

# IMPROVE ROAD SAFETY IN LIPETSK THROUGH:

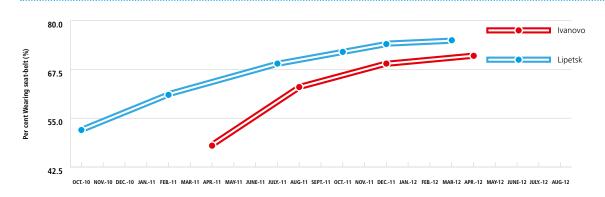
- re-running and evaluating the highly visible social marketing campaigns;
- purchasing and distributing speed cameras;
- > finalizing a legislative review;
- > strengthening police enforcement of existing laws;
- monitoring and mentoring police officers in standard operating procedures;
- holding management-level trainings for police commanders and enforcement workshops for police officers; and

 holding media training for journalists and communications officers;

# IMPROVE ROAD SAFETY IN IVANOVO THROUGH:

- launching a social marketing campaign on speed in the spring of 2012;
- Implementing and evaluating a highly visible public awareness campaign;
- > purchasing and distributing speed cameras;
- finalizing a legislative review;
- involving police officers in the design and implementation of public relations activities in order to strengthen enforcement of existing laws;
- monitoring and mentoring police officers in standard operating procedures;
- holding management-level trainings for police commanders and enforcement workshops for police officers; and
- holding media training for journalists and communications officers;

#### OVERALL SEAT-BELT USE IN IVANOVO AND LIPETSK, RUSSIAN FEDERATION, 2010–2012



Source: Johns Hopkins International Injury Research Unit, Ivanovo State University of Engineering, and Lipetsk State Technical University; unpublished data

#### CONTACTS:

WHO COUNTRY OFFICE: Francesco Zambon Email: f.zambon@whorussia.ru

- State Department on Road Safety - Ministry of Interior
- Ministry of Health and Social Development
- Ministry Transport
- Central Research Institute for Healthcare Organization and Information
- All-Russia centre for Disaster Medicine
- State Technical University for

- road infrastructure-MADI
- International Federation of the
- Red Cross Russian Red Cross

   Lipetsk and Ivanovo Government
- Scientific Research Institute Lipetsk
   State Technical University
- Ivanovo State University of Engineering







#### **TURKEY PROFILE**

**POPULATION (2010):** 72.7 million

INCOME GROUP (2010): Middle

ROAD TRAFFIC DEATHS PER 100 000 PEOPLE (2009):

13.4

NUMBER OF REGISTERED VEHICLES (2010):

15.1 million

#### THE ROAD AHEAD

In 2012 and 2013, RS10 will work to increase rates of seat-belt wearing to 50% or above in both Afyonkarahisar

and Ankara. It will also advocate for legislation that makes seat-belt use mandatory for all drivers. RS10 will roll out a targeted campaign to encourage speed control.

#### **HEADED IN THE RIGHT DIRECTION**

After completing a legislative review, Turkey has begun to strengthen its road safety management. Following the issuance of a circular by the Governor of Afyonkarahisar, seat-belt wearing rates have jumped from less than 8% to beyond 50% for drivers. These promising results will be sustained through additional training of police officers, journalists, health personnel, commercial drivers and driving instructors as well as social marketing campaigns and enhanced enforcement.

#### BETTER ENFORCEMENT FOR SAFER LIVES

While Turkey has laws on speeding, the wearing of seat-belts in vehicles and helmets on motorcycles, more will be done to enforce them. This enforcement will be combined with a solid social marketing campaign to encourage users to take responsibility for their own actions, which will result in less

lives being lost on the road. At present, approximately 200 000 people are injured on Turkish roads each year and tragically, around 10 000 people die.

While drivers and passengers in vehicles suffer the majority of these fatalities, pedestrians, cyclists and motorcyclists

account for nearly one-third of roadrelated deaths.

RS10 activities will pursue both seatbelt wearing and speed management in the two priority cities.

#### **RS10 IN TWO CITIES:**

In Turkey, RS10 is working in the cities of **Ankara** and **Afyonkarahisar** which together have a combined population of nearly 5.5 million people.



#### **RS10 TURKEY'S GOAL**

In 2012 and 2013, RS10 will work to increase rates of seat-belt wearing to beyond 50% in both Afyonkarahisar and Ankara. It will also advocate for legislation that makes seat-belt use mandatory for all drivers including commercial drivers, security and emergency staff. RS10 will roll out a second social marketing campaign and conduct strategic enforcement that targets speed control.



- Increase the rates of seat-belt usage among ALL drivers.
- Revise national traffic laws to require the correct usage of seat-belts by commercial drivers and security and emergency staff.
- Implement effective social marketing campaigns that are aligned with enhanced enforcement on seat-belt wearing and speed control.
- Engage civil society to advocate for road safety law changes.
- Monitor and evaluate the impact of activities against baseline assessment.

#### **INCREASE SEAT-BELT WEARING THROUGH:**

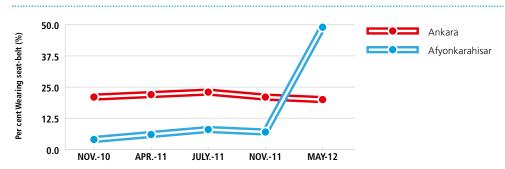
- running social marketing campaigns to inform people about the benefits of wearing seat-belts and the risks and consequences of not wearing them;
- supporting enhanced enforcement and the use of penalties for non-usage of seat-belts through conducting a needs-assessment, developing operational guidelines and coaching enforcement officers in the field;

- training commercial drivers and government workers on the importance of seat-belts, using seat-belt simulators and training journalists to write stories concerning seat-belt related risks, benefits and penalties;
- advocating for changes in legislation to make the wearing of seat-belts mandatory for commercial vehicle drivers and security and emergency staff; and
- involving governors, mayors, transport associations, the head of the parliamentary health council and the National Highway Security Office to advocate for legislation change.

#### **REDUCE SPEEDING THROUGH:**

- assessing, adapting and running social marketing campaigns focused on the consequences of speeding;
- > increasing enforcement efforts;
- > conducting baseline studies on speed-related behaviours;
- conducting needs-assessments for the planning of enhanced enforcement;
- mapping the political and decision-making interests of stakeholders and influencers; and
- involving nongovernmental organizations to advocate for change.

### OVERALL SEAT-BELT USE IN ANKARA AND AFYONKARAHISAR, TURKEY, 2011-2012



Source: Johns Hopkins International Injury Research Unit and Middle Eastern Technical University; unpublished data

#### **CONTACTS:**

WHO COUNTRY OFFICE: Serap Sener Email: seners@euro.who.int

- Ministry of Health
- Ministry of the Interior (General Directorate of Security, Ankara and Afyonkarahisar Governorates)
- Ministry of Transportation (General Directorate of Highways and General Directorate of Highway Transportation)







#### **VIET NAM PROFILE**

POPULATION (2010): 87.8 million

**INCOME GROUP (2010):** Middle

**ROAD TRAFFIC DEATHS PER** 100 000 PEOPLE (2009):

16.1

**NUMBER OF REGISTERED VEHICLES (2010):** 

33.2 million

#### **HEADED IN THE RIGHT DIRECTION**

Between 2009 and 2011, road traffic mortality rates in the intervention districts of Ha Nam and Ninh Binh Provinces decreased 25% and 20% respectively compared to a 26% increase in the comparison province of Bac Giang.

#### THE ROAD AHEAD

In 2012-13, RS10 will help the government reach even more people as implementation of the project increases from selected districts in two provinces to five full provinces. Approximately 4.8 million people live in these provinces

with an average road-traffic injury mortality rate of 23 per 100 000 people.

#### A COUNTRY ON TWO WHEELS

In Viet Nam, 75% of people who are killed on the nation's roadways are motorcyclists. 95% of the nearly 32 million registered vehicles in Viet Nam are motorized two- and three-wheelers.

Most of those who are killed are young adults. Road-traffic crashes are the leading cause of death for those aged 15 to 29 years.

In response, Viet Nam has taken important steps to address its road-crash crisis. After the country enacted a

motorcycle helmet law in 2007, the helmet-wearing rate jumped from below 30% to over 95%. This change alone was estimated to have saved more than 1500 lives and prevented almost 2500 serious injuries.

Many road safety challenges still remain. Awareness of crash risks is still relatively low and enforcement of road safety laws could be improved. Loopholes in existing laws mean that many Vietnamese are not wearing adequate-quality helmets and that

enforcement on key risk factors such as drink-driving is not yet fully effective.

To address these challenges, RS10 is working to help the government of Viet Nam through a combination of actions, including improving legislation, equipping and building the capacity of the police to carry out strategic and effective enforcement, and running social marketing campaigns.

#### **RS10 IN FIVE PROVINCES:**

In Viet Nam, RS10 is working in the provinces of:

Ha Nam

**Ninh Binh** 

**Vinh Phuc** 

**Quang Ninh** 

**Bac Ninh** 

This represents a total of around 5 million people. Social marketing campaigns are implemented nation wide.



#### **RS10 VIET NAM'S GOALS**

The overall objective goal of RS10 Viet Nam is to help the Vietnamese Government prevent death and serious injuries on Viet Nam's roads. The focus of the project's first phase, from 2010 to 2011, was primarily on drink-driving prevention. The second phase, from 2012 to 2014, continues to target drink-driving, with an additional focus on increasing the use of high-quality helmets that meet safety standards.



- Strengthen the capacity of partners to develop and implement mass-media social marketing campaigns.
- Increase the knowledge and skills of traffic police for strategic, intelligence-driven enforcement.
- Support long-term, random and enhanced enforcement through the use of project-procured breathalyzers.
- Monitor and evaluate the impact of interventions compared to comparison sites and baseline assessments.

#### **REDUCE DRINK-DRIVING THROUGH:**

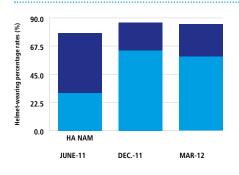
- closing legislative loopholes on drink-driving in road safety traffic legislation;
- procuring additional breathalyzers and consumables, primarily for new intervention provinces;
- training traffic police in strategic enhanced

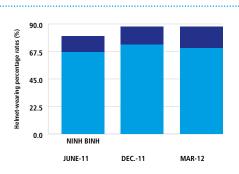
- enforcement. Trainings will take place in three new provinces as well as at new sites in two provinces where RS10 has already been active; and
- > developing new national social marketing campaigns on drink-driving, with increased focus on reaching target audiences in southern provinces.

# **INCREASE BOTH HELMET WEARING** RATES AND THE USE OF STANDARDIZED **HELMETS THROUGH:**

- prioritizing actions to close legislative loopholes on helmet use such as linking the existing national helmet law to the national helmet-quality standards so that all motorcycle riders and passengers are required to wear higher-quality helmets; and
- developing new national social marketing campaigns designed to increase the wearing of quality helmets.

# OBSERVED HELMET WEARING BY HELMET TYPE IN SELECT PROVINCES. HA NAM AND NINH BINH, VIET NAM, 2011-2012







Source: Johns Hopkins International Injury Research Unit, World Health Organization and Hanoi School of Public Health; unpublished data

#### CONTACTS:

WHO COUNTRY OFFICE: Jonathon Passmore Email: passmorej@wpro.who.int

- National Traffic Safety Committee (NTSC): Chair -
- Committee of Ninh Binh
- **Provincial Traffic Safety** Committee of Quang Ninh
- Provincial Traffic Safety Committee of Ha Nam
- Provincial Traffic Safety
- Provincial Traffic Safety Committee of Bac Ninh -
- Provincial Traffic Safety Committee of Vinh Phuc

- Traffic Police of the Ministry of Public Security (C67)
- Department of Traffic Safety. Ministry of Transport
- Hanoi School of Public Health
- Ministry of Education and Training Health Environment Management Agency, MoH









#### **RS10 CONSORTIUM PARTNERS:**

The World Health Organization (WHO) provides financial and technical support to elements relating to social marketing, legislative review and revision, and the procurement of enforcement equipment in all 10 countries as well as trauma care and data system improvement in two countries.

contact person: Dr Margie Peden EMAIL: pedenm@who.int

FOR MORE INFORMATION: http://www.who.int/violence\_injury\_prevention/ road\_traffic/countrywork/en/index.html

The Global Road Safety Partnership (GRSP) is responsible for capacity development of different stakeholder groups, in particular through a series of workshops relating to particular risk factors and strategies to address these in all 10 countries.

contact person: Ms Gayle di Pietro EMAIL: gayle.dipietro@irfr.org

FOR MORE INFORMATION: http://www.grsproadsafety.org/what-we-do/ road-safety-10-countries

The International Injury Research Unit from Johns Hopkins University (JHU) is responsible for ongoing monitoring and impact/outcome evaluation of the programme in all 10 countries as well as the development of a capacity development package for health care workers.

contact person: Prof Adnan Hyder EMAIL: ahyder@jhsph.edu

FOR MORE INFORMATION: http://www.jhsph.edu/research/centers-andinstitutes/johns-hopkins-international-injury-research-unit/rs10.html

#### The Association for Safe International Road Travel

(ASIRT) is responsible for engaging the nongovernmental organizations in Egypt, Kenya and Turkey and working with the media to promote road safety in three RS10 countries.

**CONTACT PERSON:** Ms Cathy Silberman EMAIL: csilberman@asirt.org

FOR MORE INFORMATION: http://www.asirt.org/

The WRI Center for Sustainable Transport (EMBARQ) is responsible for mass transit projects in India, Mexico and Turkey.

**CONTACT PERSON:** Ms Claudia Adriazola-Steil

EMAIL: cadriazola@wri.org

FOR MORE INFORMATION: http://www.embarq.org/

The World Bank, through its Global Road Safety Facility, is responsible for the assessment of infrastructure in China, India and the Russian Federation

**CONTACT PERSON:** Ms Tawia Addo-Ashong EMAIL: taddoashong@worldbank.org

FOR MORE INFORMATION: http://go.worldbank.org/EZ2GWCIMO0



#### **DATA SOURCES:**

#### INCOME GROUP:

http://databank.worldbank.org/Data/Views/Reports/TableView.aspx

**COUNTRY POPULATION DATA:** 

http://esa.un.org/undp/wpp

CITY POPULATION DATA: latest census published online **ROAD TRAFFIC DEATH RATES/100 000 POPULATION:** 

http://whqlibdoc.who.int/publications/2009/9789241563840\_eng.pdf

NUMBER OF REGISTERED VEHICLES:

http://whqlibdoc.who.int/publications/2009/9789241563840\_eng.pdf

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for which there may not yet be full agreement.

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