

# Skills Development for Research on Road Traffic Injuries

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**Plant Genetic Resource Centre,**  
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**Sri Lanka**

# Global Burden of Injury

- Estimated 5 million people died from **INJURIES** in 2000 (WHO 2002)
- Accounting for 9% of global deaths
- 90% of the injury deaths occur in low- and middle income countries

# Burden of injury in Sri Lanka

- Injuries are the leading cause of hospital admissions (2000 per 100,000 population) (AHB, SL 2002).
- Injuries are the 10<sup>th</sup> leading cause of hospital deaths (AHB, SL 2002).

# ROAD TRAFFIC INJURIES

- **Road traffic injuries** are the leading cause of injury related mortality and morbidity in Sri Lanka accounting for 25% to 30% of the burden (AS, SL 2004).

# Global Burden of RTIs

- More than **20 million** people are injured and killed annually from RTIs (WHO 2004)
- Burden falls most heavily on **developing countries** (particularly Asia), due to the **rapid increase** in the number of vehicles
- By 2020, **2.3 million will die**

# ROAD TRAFFIC INJURIES – Globally – Cost

- Economic cost estimated as **US\$ 518 billion** annually (TRL 2000)
- Of this **12.5%** or **US \$ 65 billion** is accounted for by the developing countries

# Global Burden of RTIs

- **Globally, RTIs will increase by over 60%**
  - **80% increase in low and middle income countries**
  - **30% decrease in high income countries**

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

- In the year 2000, **54,239** road traffic crashes were reported, killing **2,150** people and injuring **19,835** (TP data)
- **Daily** – 6 people are killed
- **Every hour** – 2 are injured
- **Every 10 minutes** – a RTC is reported

# **ROAD TRAFFIC INJURIES – Situation in Sri Lanka**

- **No information about the unreported crashes.**
- **Documented that 25% of fatal RTCs are not reported (Wooton J et al 1996).**

# Research needed

- To identify causes
- To interest policy makers
- To plan and implement preventive programs

# Skills Development for Research

- Therefore the RTIRN is conducting this workshop

**Welcome you all to this workshop**

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

- Majority killed and injured are **young people**, between 15-44 years.
- People needed for the development programs of the country.
- **Can SL afford to loose them?**

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

- About 40% to 50% of the injured and killed are **pedestrians** (RHF 2004)-  
**?Poor people**
- **Principal wage earner** - ?Increase in poverty
- RTIs are a **SOCIAL PROBLEM** affecting Sri Lankan society.

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

- Economic loss range from Rs. 5 billion (5<sup>th</sup> MBI 2004) to Rs. 10 billion (US\$ = 100Rs.).
- Estimated loss from a (5<sup>th</sup> MBI 2004),
  - Fatal crash is Rs. 2,000,000
  - Injury crash is Rs. 35,000
  - Damage only crash is Rs. 17,000

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

- It was estimated that in 1999, 0.5% of the GDP was lost from RTCs in Sri Lanka (5<sup>th</sup> MBI 2004)
- In rupees it was,

**5,047,158,558**

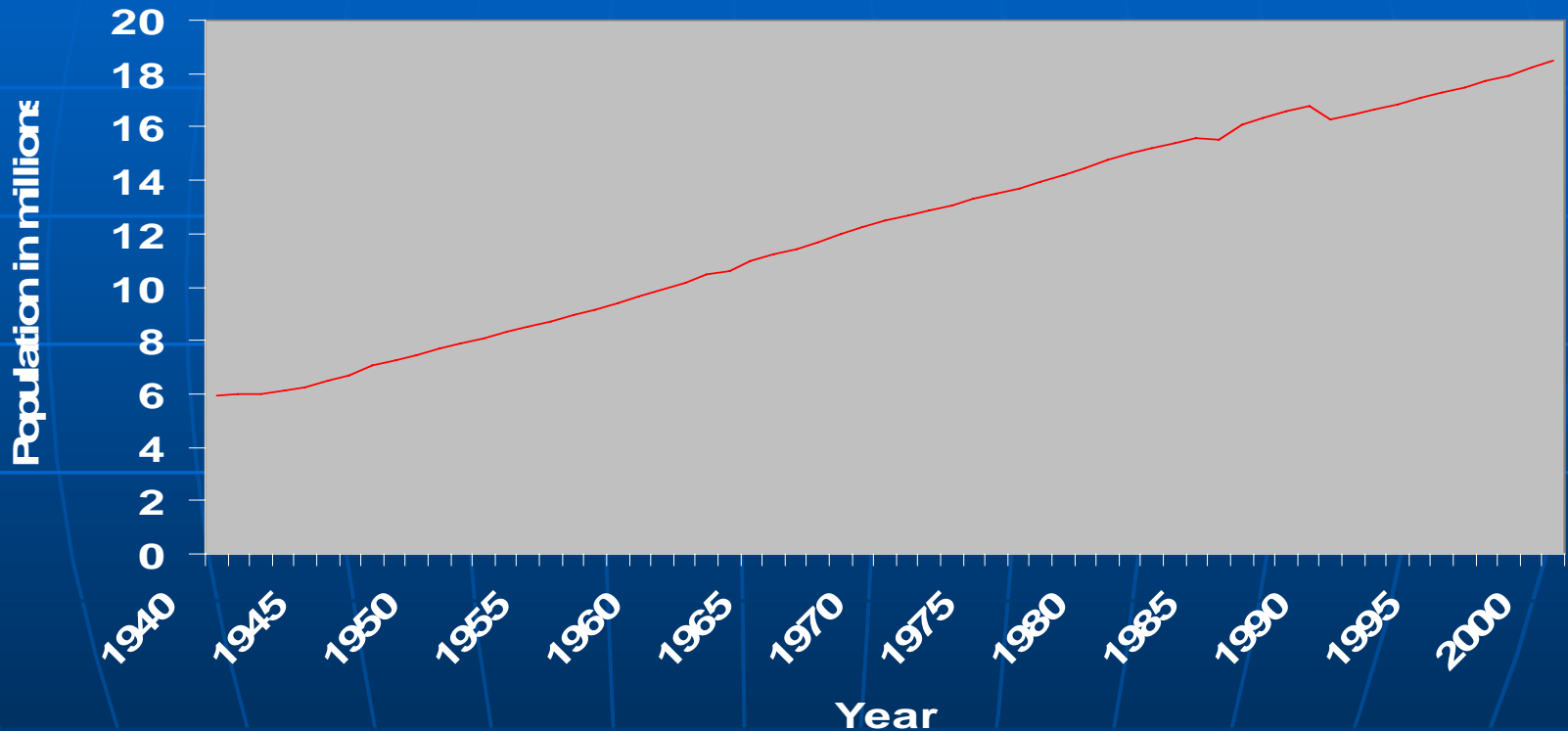
## ROAD TRAFFIC INJURIES – Situation in Sri Lanka

- **Some statistics related to RTAs in Sri Lanka from 1940-1998 (CS data)**

	<b>1940</b>	<b>1998</b>	<b>Increase</b>
<b>Road crashes</b>	3979	50 959	12-fold
<b>Deaths</b>	168	2 023	11-fold
<b>Motor vehicles</b>	30 802	1 511 207	48-fold
<b>Population</b>	5 951 000	17 935 000	3-fold
<b>Roads (km)</b>	10 114	22 457 *	1.2 fold

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

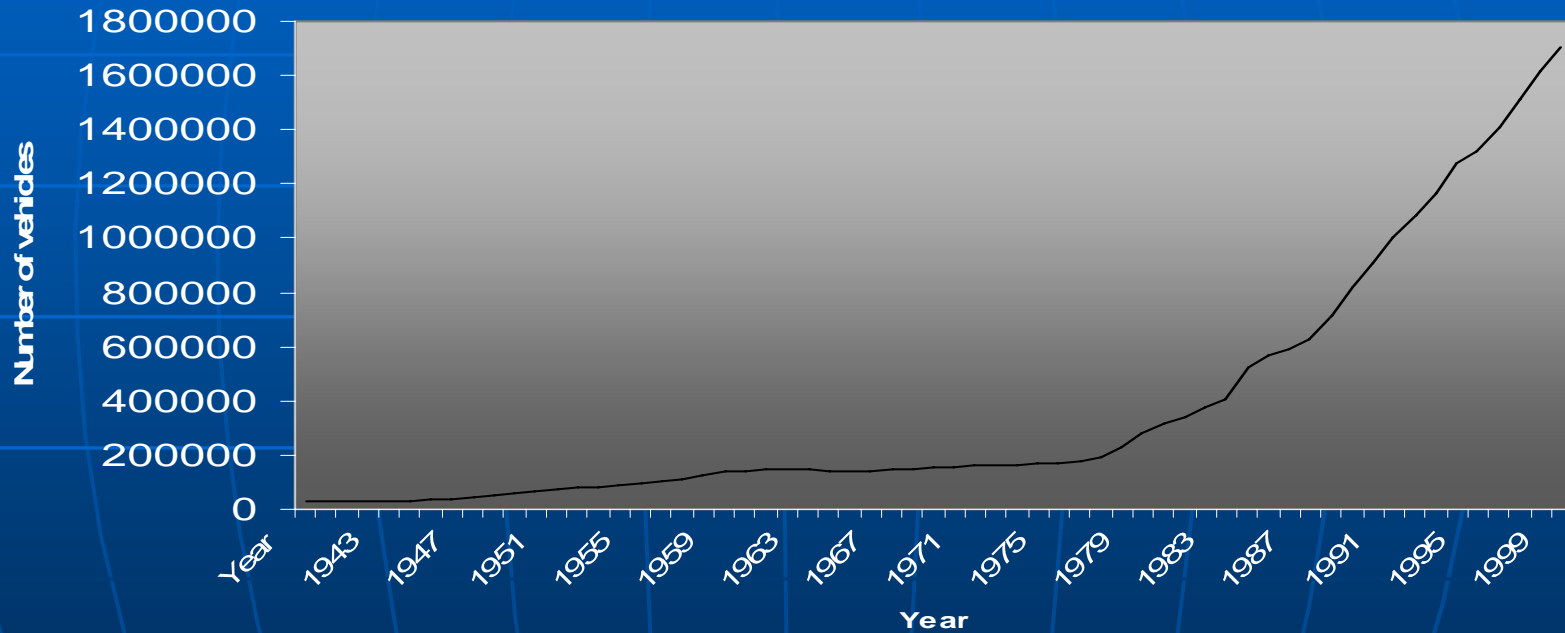
## Population growth from 1940 - 2000



**Population increased by 2 fold**

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

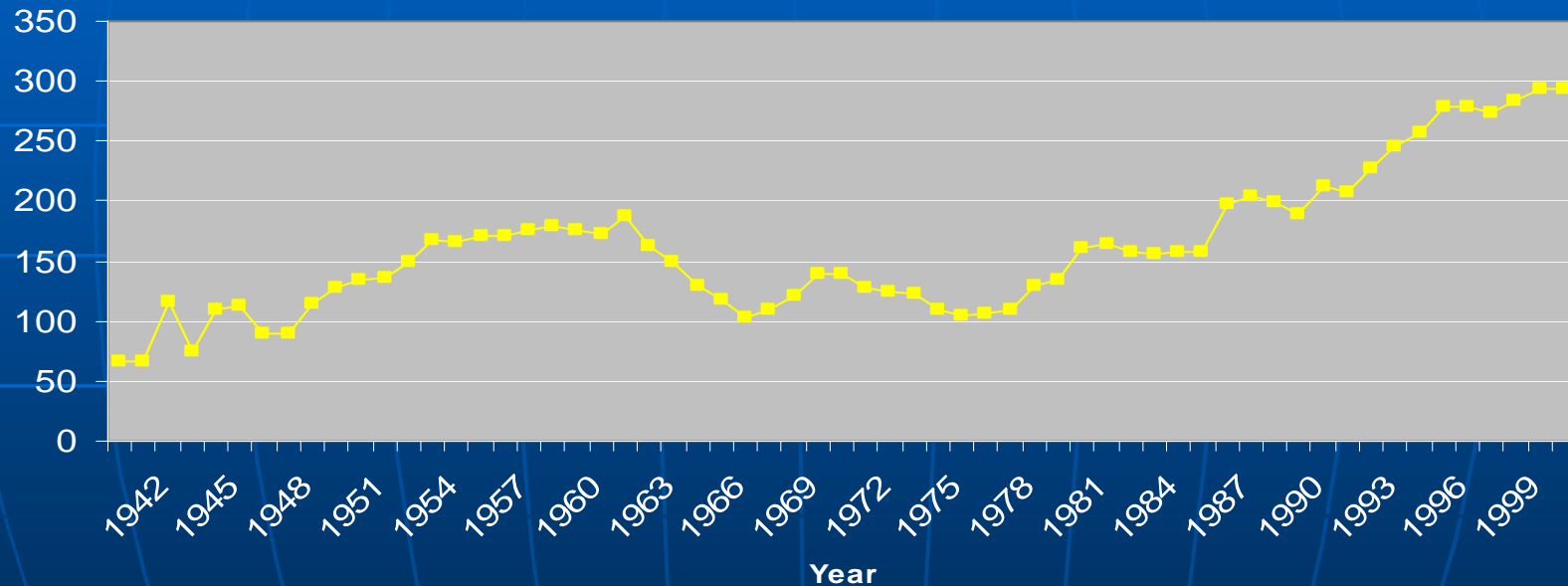
**Increase in the number of registered motor vehicles (1940 - 2000)**



**Registered motor vehicle increased by 54 fold**

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

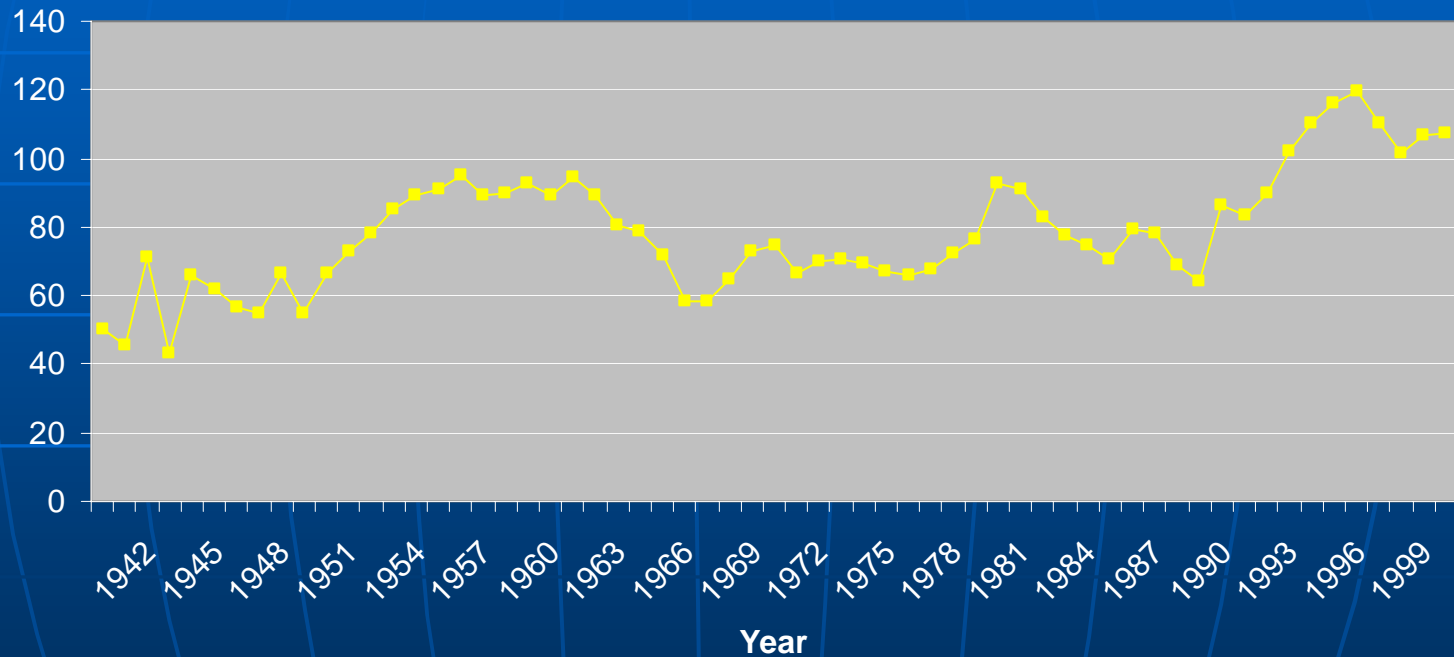
## Road traffic accidents per 100,000 population 1940 - 2000



**RTAs per 100,000 population increased by 3 fold**

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

## Road traffic injuries per 100,000 population



**Road traffic injuries per 100,000 population increased by 114%**

# ROAD TRAFFIC INJURIES – Situation in Sri Lanka

Road traffic fatalities per 100,000 population



Road traffic fatalities per 100,000 population increased by 3 fold

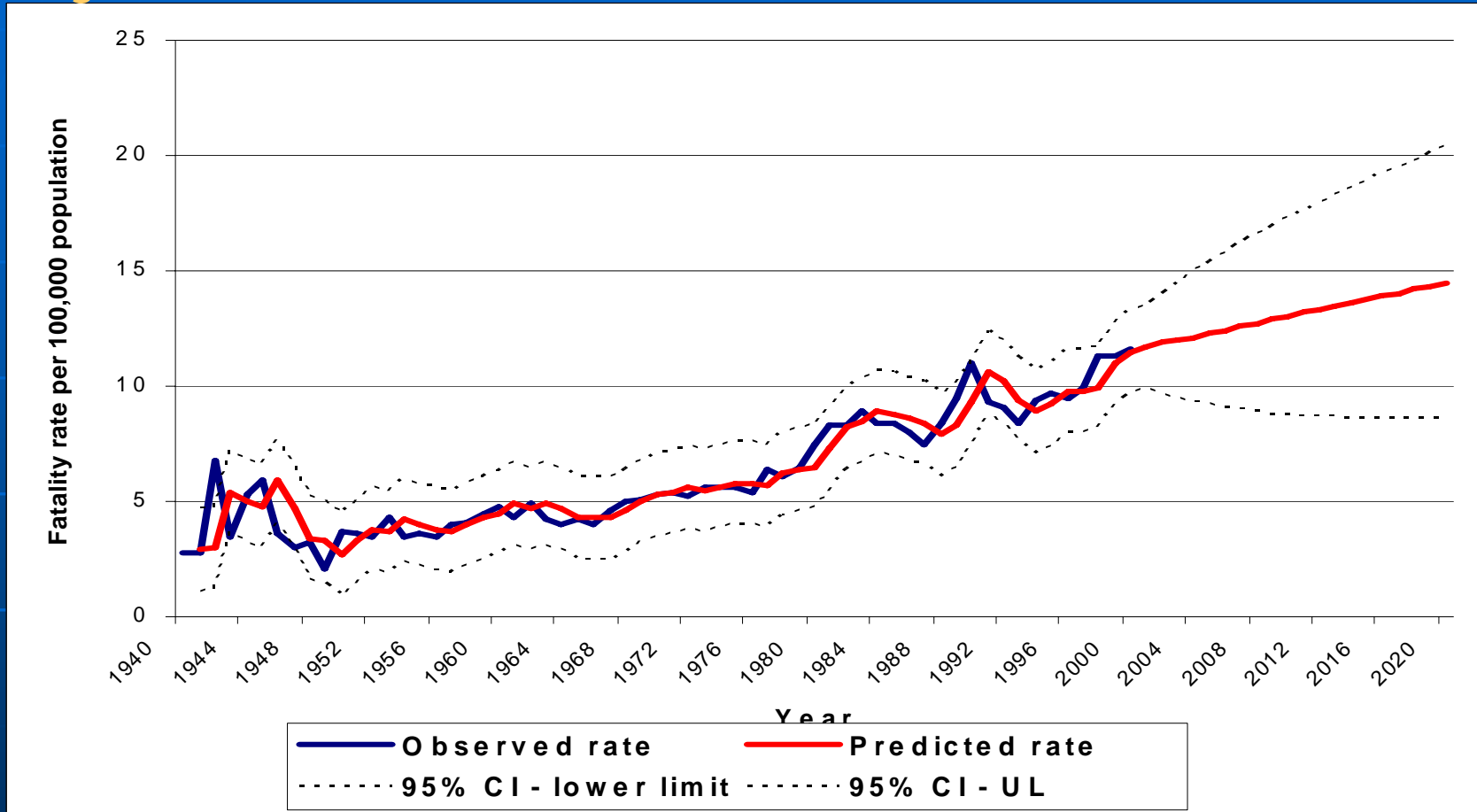
# ROAD TRAFFIC INJURIES IN SRI LANKA

## – The future

- If no action is taken, in the next 20 year (Safety 2004),
  - **50,000 will die**
  - **400,000 will be injured**
  - **More than**  
**Rs. 20 x 5,047,158,558**  
**will be lost**

# ROAD TRAFFIC INJURIES IN SRI LANKA – The future

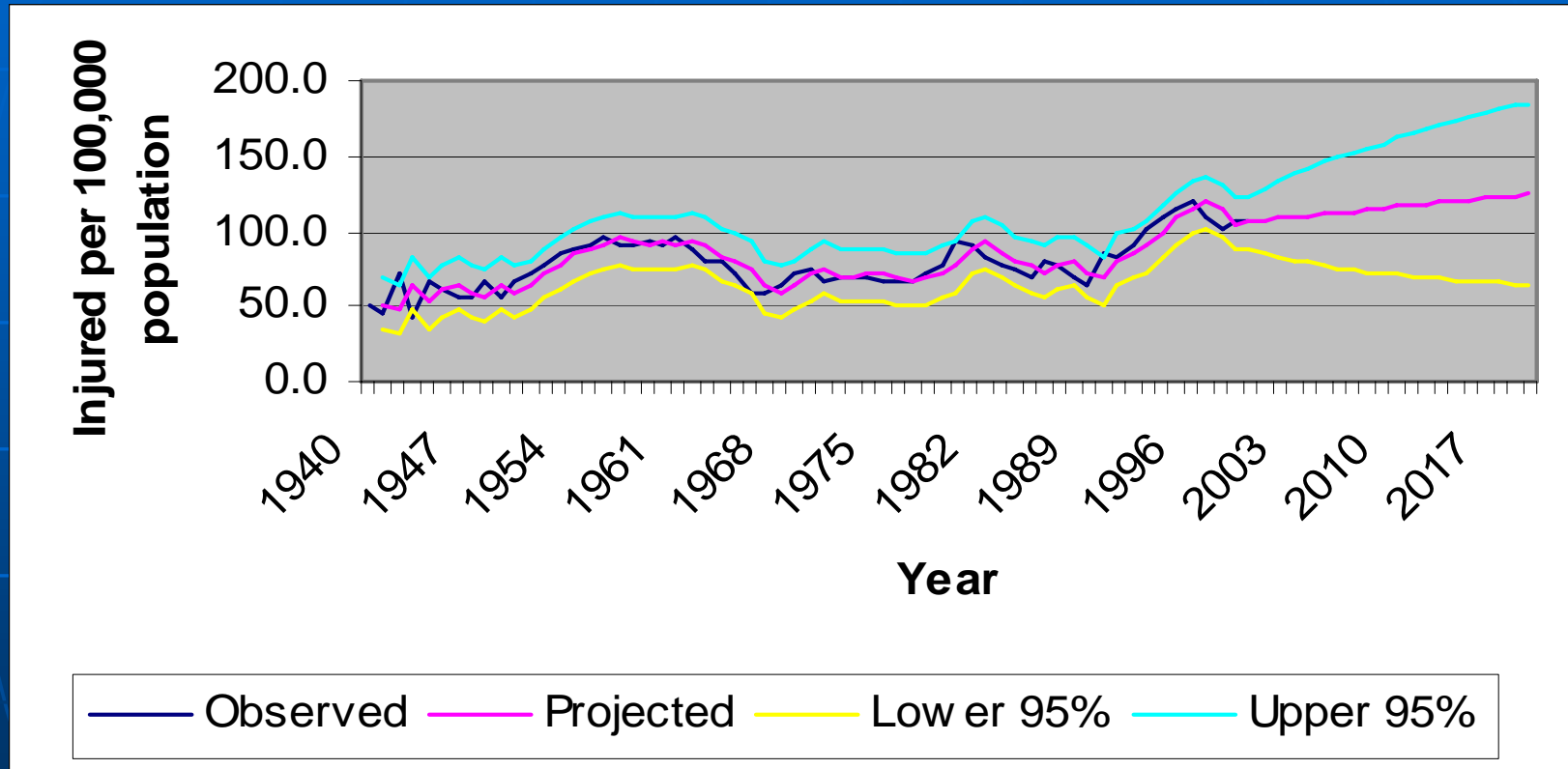
## Projected rate for road fatalities in Sri Lanka



**By 2020, RT Fatalities rate will increase by 25% to reach 14.5 fatalities per 100,000 population (Safety 2004)**

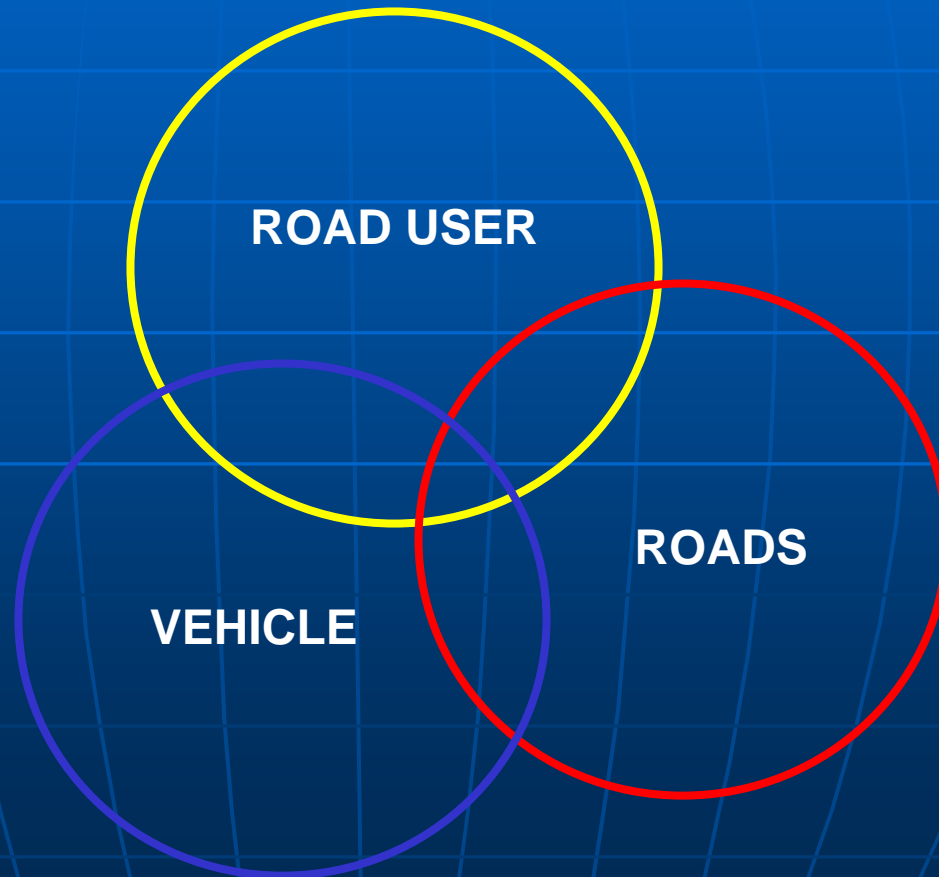
# ROAD TRAFFIC INJURIES IN SRI LANKA – The future

## Projected rate for injured from RTAs in Sri Lanka



**By 2020, RTI rate will increase by 16% to reach 174.7 per 100,000 population (ISC 2004)**

# Road Traffic Injury Prevention Requires a “Systems Approach”



# ROAD TRAFFIC INJURIES IN SRI LANKA

- IS AN IMPORTANT DISEASE WHICH HAS ASSUMED EPIDEMIC PROPORTIONS
- **WHY NO ACTION?**
- Even though everyday at least one RTC is reported in media

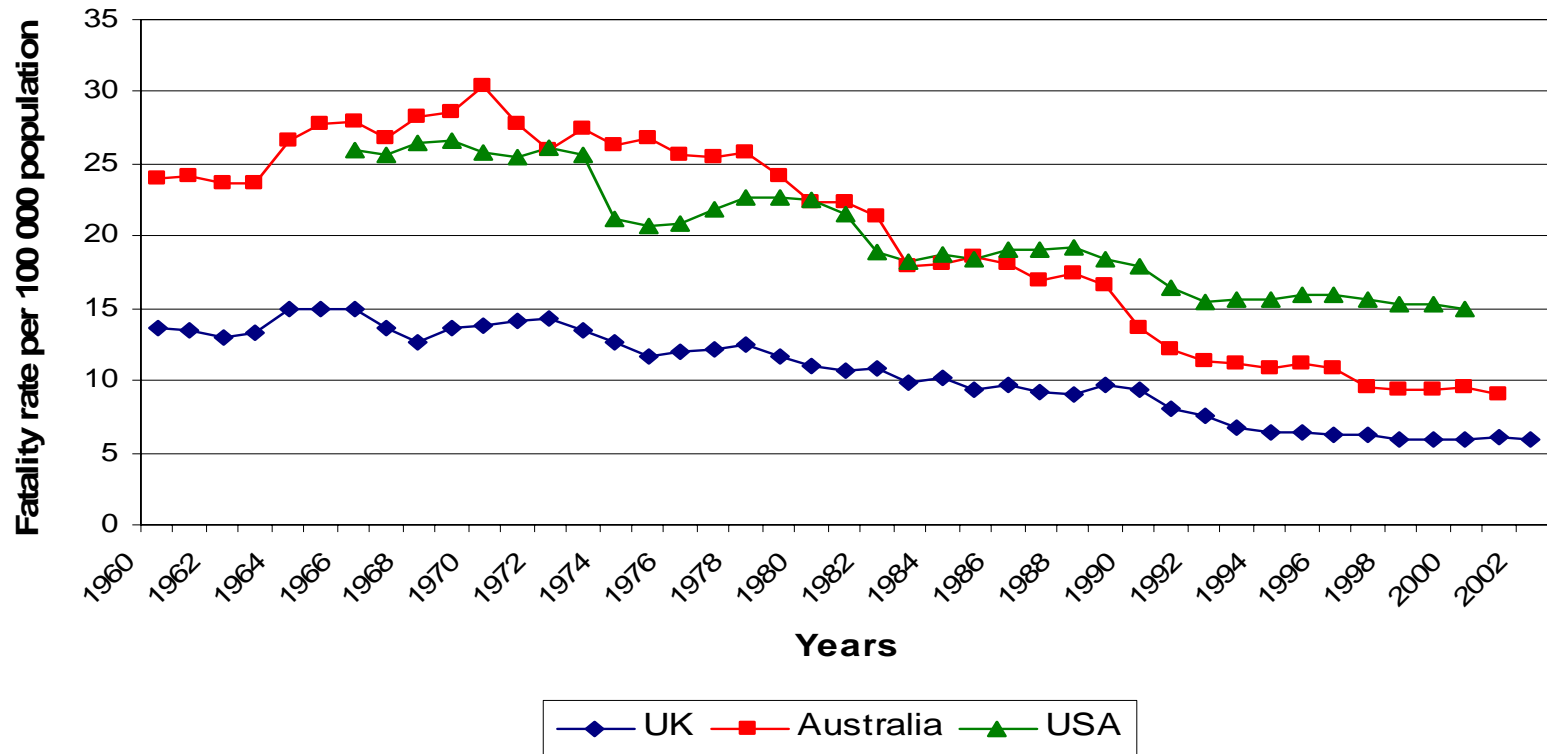
# ROAD TRAFFIC INJURIES IN SRI LANKA

- Dengue, Malaria and TB kills far less but they have programs and campaigns for their prevention and control (AHB 2002)
- Even one death attracts huge media attention
- **WHY?**
- I do not know, but is scary? I or you might be the next victim.

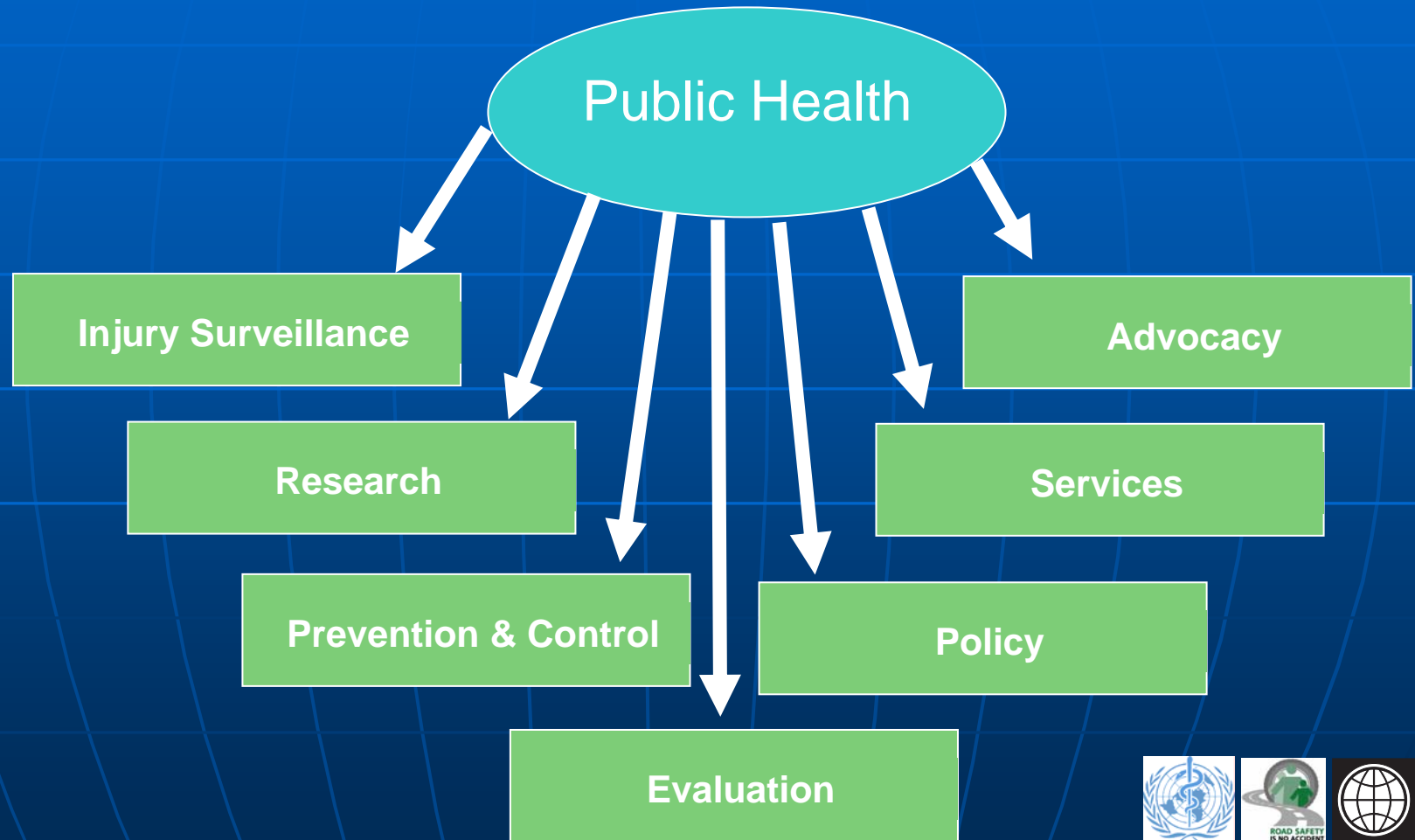
# ROAD TRAFFIC INJURIES IN SRI LANKA

- Epidemic
- No action or interest by relevant people
- Reason for my interest in this disease

# Road Traffic Injury Prevention can be Achieved



# Road Traffic Injuries are a Public Health Problem



# HEALTH PROFESSIONALS AND RTI RESEARCH

- Health professionals taking an interest is very important to generate interest among others, especially politicians
- Easy accessibility in collecting data
  - From hospitals, police etc.

# ROAD TRAFFIC INJURIES IN SRI LANKA – PREVENTION & CONTROL

- Appoint a DIRECTOR for INJURY PREVENTION in the Ministry of Health
- Form a CAMPAIGN for INJURY PREVENTION
- Establish an INJURY SURVEILLANCE SYSTEM

# ROAD TRAFFIC INJURIES IN SRI LANKA – PREVENTION & CONTROL

- FORM AN ACTIVE COMMITTEE WITH POWER,
- Consisting of all related people, such as Doctors, Engineers, Police, Policy makers, EMVs, RDA and UDA representatives, drivers (CTB, PVT bus, TW, School vans) etc.

# ROAD TRAFFIC INJURIES CAN BE PREVENTED – in Sri Lanka

- But, copying strategies directly from developed countries might not work.
- **WHY?**
- Because the scenario is different.
- Need to find local risk factors and solutions

# **ROAD TRAFFIC INJURIES CAN BE PREVENTED – in Sri Lanka**

- **For which local research is needed**
- **For research money is needed**
- **To get money, people with money have to recognize that RTIs and deaths are a significant problem**

# VISION AND MISSION OF RTIRN

- To reduce RTI's in Low & Middle Income Countries

# Road Traffic Injuries Research Network (RTIRN)



# RTIRN SECRETARIAT IN SRI LANKA

- Opportunity for Sri Lanka as well as regional countries to highlight the importance of RTIs

# VISION AND MISSION OF RTIRN SECRETARIAT

- To generate knowledge on RTIs
  - At Launch of the SECRETARIAT – 4<sup>th</sup> January 2006
  - Workshop on “Skills development in RTI research” – 5<sup>th</sup> January 2006
  - Newsletter
  - Increasing membership
  - Web site

# VISION AND MISSION OF RTIRN SECRETARIAT

- Thereby generate interest in RTI's among relevant people to investigate them – research
- Research needs funds
- More people becoming interested will generate more funds which will make more people interested etc.
- Capacity building

# RTIRN SECRETARIAT

- Most of the regional countries have people interested in RTIs
- Sri Lanka very few
- Having the Secretariat in Sri Lanka will be a great opportunity for me as well as the people of Sri Lanka to address this forgotten National Tragedy
- Thank you

THANK YOU

# **Public Health Emergency and Disaster Management Training Course**

**13th December 2005**

**Road Traffic Injuries –  
Group work**

## Group one

# Topic: Develop a Road Traffic Injury/ Accident Surveillance System

- What is it?
- Why it is needed?
- Plan a RTI SS – identify resources needed, construct one – local or national
- Cost ?effectiveness
- Monitoring and evaluation

## Group two

# Topic: Develop a RTI/RTA prevention program/campaign

- Justification
- Objectives
- Identify resources
- Cost? – effectiveness
- Location
- Monitoring and evaluation

## **Group three**

**Topic: How to quantify the under reported RTAs/RTIs in Sri Lanka**