FIRST ONE HOUR ARE THE GOLDEN HOUR IN EMERGENCIES
Pilot Project initiated by
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INDIA.
The Vision

Trauma Systems, when fully implemented throughout the entire India, will enhance community health through an organized system of injury prevention, acute care and rehabilitation that is fully integrated with the public health system in a community. Trauma care systems will address the daily demands of trauma and form the basis for disaster preparedness.
Why Road Traffic Accident (RTA) & Emergency Management Services by IAPA?

Road Accidents – A Public Health Issue

World’s first Road traffic death was recorded in 1896. Everybody concerned at that time reported to have said, “this must never happen again”.

More than a century later, 1.2 million people are killed on Roads every year and up to 50 million more are injured.
Some facts on RTA

- RTA rank as the 11th leading cause of death and accounts for 2.1% of all deaths globally.
- It is the second leading cause of death among people aged 5-29 years.
- RTA injures and disable approx 50 million and 20 million people a year respectively.
- RTA injuries are becoming the third largest contributor to the global burden of diseases by 2020 after Ischemic Heart Disease and Unipolar major depression.
Some facts on RTA

- It is estimated that every year RTA costs Billions Globally.
- RTA injury puts significant strain on Health Care Budgets.
- If the current trends continue the number of people killed and injured, on the world's roads will rise by more than 60% between 2006 and 2020.
- Most of these injuries occur in developing countries.
- Increasing movement is the key factor in RTA but "Mobility should not get priority over human life".
RTA?

- Increased Vehicle Traffic
- Increased Accident on Road
- Increased Mortality and Morbidity
- Increased Health Burden
- Healthy lives on roads lost
- Breadwinner of Family lost
- Cream of the society lost
- Great Economic Burden (3.2% of GDP)
About 9000 people in Tamil Nadu died due to RTA in 2002.

- 50% of the Accident victims were aged 20-45 years.
- 45% of the pillion riders died in Road accidents.
- Two wheeler riders succumb to their injuries more as they did not wear Helmets.
- 95% of the Accidents occurred due to human (error) factor.
- 5% of the Accidents occurred due to Bad Roads and poorly maintained vehicles.
- MTC buses were involved in 278 accidents and more than 40 people have died.
Challenges in RTA Rescue work

Reaching Medical assistance to the site within the “Golden Hour”

1. Time
   a. “Platinum Hour” – First 30 minutes after the incident
   b. “Golden Hour” - First one hour after the incident

2. Communication - Telephone Message
   - Toll Free Number throughout India as 100 for police. Eg.555/108
   - Mobiles can be used
   - Premium numbers with 4 digit 1066/1033 etc

3. Transport - Equipped Transport Ambulance

4. Medical Assistance – Manpower, drugs & Equipments

5. Legal formalities

6. Financial Implication
Emergency Accident Relief Centres:

**AIM:** Reach to victim in the Golden Hour
- Road Side Booths
- Trained Man Power
- Equipped Ambulance
- Toll Free Number 108/1033
- Network with Hospitals

**Motto**
Reach to lives in Accident & Emergency
Tamil Nadu EARC Experience

TN Government has taken up the project of RTA & Emergency Management aggressively.

85 Booths have been sanctioned on highways.

65 Booths have been erected on highways & run by interested hospitals.

IMA TNSB is fully involved in this project

System is highly beneficial to the public.
Specific Objectives

a. Rushing Medical aid to the site of RTA (Prehospital Medical Care)

b. Safe & quick Transport to Trauma Care Centre

c. Offering Best & Quick Trauma Care for the victim in hospital (Hospital care)

d. Standardizing the above stages of Acute Trauma Care & EMS.

e. Creating a National Forum to address the issue of “Road Safety”.
EMERGENCY ACCIDENT RELIEF CENTRES (EARC) on TUTICORIN HIGHWAYS
Accident & Emergency Booths on Highways

CITY – TRAUMA CARE CENTRE

25km

A & E BOOTHs

25km

CITY – TRAUMA CARE CENTRE
MOBILE HOSPITAL WITH TOILET

SIZE : 15' L x 8' W x 8' H

OUT FITTINGS

1. CORRUGATED SHELL
2. INSULATED INTERIOR PANELLING
3. WALL MOUNTED FAN
4. 1X40W TUBE SET
5. SLIDING WINDOW
6. ENTRANCE DOOR
7. TABLE
8. DOCTOR CHAIR
9. VISITOR CHAIR
10. EXAMINATION BED
11. LOUVER
12. E.W.C WITH PIPE CONNECTION
13. TAP FOR TOILET
14. WASH BASIN, MIRROR, TOWEL ROD
15. COMPLETE ELECTRICAL WIRING
   SWITCHES, SOCKETS
16. MAIN BOARD CONNECTION,
    PROVISION
17. MEDICINE RACK
18. PARTITION FOR TOILET
19. TOILET ROOM CEMENT FLOORING
20. 200 LITRES SINTEX TANK

1 No.
2 No.
3 No.
4 No.
5 No.
6 No.
7 No.
8 No.
9 No.
10 No.
11 No.
12 No.
13 No.
14 1 Set.
15 1 Set.
16 1 No.
17 1 No.
18 1 No.
19 1 No.
20 1 No.
ORGANISATION OF IAPA RTA & EMS
Three level system

LEVEL 1
PRE HOSPITAL E.M.SERVICES
Ambulance Telephone No. Para Medicals
A & E Booths

LEVEL 2
SECONDARY CARE
EVERY 50.KM
TRAUMA CARE CENTRES
District HQS, Private Hospitals

LEVEL 3
TRAUMA CARE HOSPITALS
Medical Colleges And Super Specialty Hospitals
LEVEL 1. Pre Hospital care (Backborne of Emergency Medical Services)

AIM: To Transport
First Aid
CPR

The basic requirements are:
2. Ambulance fully equipped.
3. Trained Paramedical personal
5. Medical personal (?)
6. Providing Camera etc to address Medico legal aspects.

Their duties and responsibility ends once they go to Level 2.
LEVEL.2. Secondary Level
Trauma care centre 50km on NH

AIM: To Treat life threatening Emergencies

These centers have fully equipped, emergency room and operation theatres, X ray and Laboratory. And capable of managing all cases of emergency and trauma 365 days in a year, 7 days in week and 24 hrs per day.

The guidelines and the grading according to IMA.
LEVEL 3. Territory Level of care. Trauma Care Hospitals 50km/100km

**AIM**: To treat Major complication – Brain, Ortho, Abdomen, Chest

These hospitals meet the complications and have all facilities including Facility for ER, OT, Lab, X ray, CT Scan, Blood Bank equipment and Trained man power.
Communication

- Forms a vital link for the management.
- Telephone dept to provide this facility in all the recognized centers free of cost (as 911 in USA)

  That alone is not sufficient.

- The mobile service providers to provide free cell phones to the centers.

- Two way radios must be provided to the ambulances.

- The computers and websites will be handy for the uniform follow up of the system and guidelines.

- Display on Roads every 10Km about A & E Booths & Telephone Numbers.
Transport

- Fully equipped ambulance to reach the site within 5 to 10 minutes.
- The ultimate goal; “Hospital on wheels” in order to give care up to Level 3 if not 4 at the accident site itself. When the cardiac catheterization is fitted on a vehicle why not a theatre.

**Hospital on wheels**

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<th>SOT</th>
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<td>Suction</td>
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<tr>
<td>IV Fluids</td>
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Funding

- Initial cost & Running cost borne by Sponsor Hospital.
- In India the spirit of doing good services are still alive. Vehicle manufacturers, two wheeler owners, car owners, Lorry owners Industrialists Business Person, Lions, Rotary, Pharmaceuticals etc., approached for Assistance.
- The sponsor hospital can approach them to get the A & E Booths & Ambulance donated.
IF THERE IS A WILL THERE IS A “WAY” to generate funds

But what ever may be the source of funding, from the victims point of view it must be as follows

CARE LEVEL I    Free
CARE LEVEL II   Free Transfer to Government Hospital
                  Insurance
                  Self Paying
CARE LEVEL III Mutual Agreement

Accident Insurance will play a vital bridge in Trauma Care
Partners in the Project

Involve All Stakeholders

1. Ministry
   a) Ministry of Health
   b) Ministry of Surface Transport
   c) Ministry of Petroleum
   d) Ministry of Law
   e) Ministry of Communication
   f) Police
   g) Ministry of Education

2. Voluntary Agencies – Rotary
3. Automobile Industry
4. National & International Agencies
   IMA, WHO, UNO, IMF, UNICEF, World Bank, NGOS
5. Public
6. Industrial Houses
7. Philanthropists
8. Press & Media
9. Insurance – TPA’S
Awareness

Road Crash is Preventable.

Strong Political will and Citizen awareness is the corner stone of Road Safety.
IAPA’S Advocacy for Road Safety

Must be an opinion builder on RTA Prevention

- Must respond to the policies of Government on Road Safety issues.
- Must be a forum for Road Safety activists to come together and work for this cause.
- Must play a positive role in promoting Accident Insurance.
Advocacy must be strong against

a) Drunken Driving & Pedestrians

b) Mobile Phone use while driving
Action Plan

Proposals have been given to:

- Ministry of Surface transport
- Ministry of Communication
- Ministry of Health
Action Plan

National Committee / Task Force

Zonal Members - Five
North, West, East, South & Delhi

Task :

A: Standardisation

- Highways Booth
- Ambulance
- Pre Hospital Care
- Hospital Care
- Uniform Telephone No. in India

B: Co-ordination- Liaison with Govt/Voluntary Agencies / State Task force / Ministries

C: Monitoring the functioning of the project at State & Branch Level

D: Improvements & future vision.
Action Plan (contd....)

**Step I**: State Government Blessings
- Site allotment
- Electricity & Telephone

**Step II**: Identify Sponsor Hospitals
- Willing to erect the Booth & Ambulance
- Maintaining the Booths
- Fulfilling the Standards of Trauma Care Centre & Hospital

**Step III**: Sponsors for the Booths & Ambulance – IMA will help but it is the responsibility of the sponsor hospital to identify the Donors. (ie) Rotary, Corporates, etc.,

**Step IV**: Para Medicals appointment and initiation of Services.

**Step V**: Monthly Reporting to HQs & Monitoring the services

**Step VI**: Improvements
Our target should be

1. To reach the unreached so far

   Every trauma/emergency patient will be attended within 5–10 mts and the so-called Door to needle time must be reduced to the minimum or the needle will reach the door (Ambulance fitted with trauma care will attend the patient).

2. Establishing the EMS care centers by equipping the Nursing homes with treatment protocols, fixed fool proof procedures, immunity to legal in some centers so that they can act without fear for the treatment of trauma patients.
Our target should be ------------

3. Monitoring the trauma/Emergency activities by web based connectivity and removing the hurdles which will develop in due course.

4. Well-developed ambulances with faultless communication systems on the lines of Aviation style and check lists on the lines of cockpit checking

5. Developing management protocols with uniform cost factor so that all sections will benefit.
Public Private Partnership

- Health on Roads is a Public Health issue
- RTA Injuries need everybody’s co-operation including Bystanders

AIM: Reach to the injured within Golden Hour
Public Private Partnership

Government’s initiative:

Ambulance to be deployed at every 50 km of National Highway. Press Release Monday, July 3, 2006
What IAPA Can Do

- Provide Technical Expertise for RTA Booth and Trauma Care Centre
- Erection and Run RTA Booth by networking with IMA, Private Hospital and NGO’S
- Monitoring RTA Booth and Trauma Care Centre
- Updating Road Traffic Injury and Trauma Care System in the country.
What World Bank & NHAI Could Do

- Funding For Road Budget Include Trauma Care Booth & Accessories
- Co-ordinate with IAPA for the Road Traffic Injury Care System on Highways
“Every great achievement was once considered impossible”

DR. Hariharan
Chief Executive - IAPA
Asstt. Secretary, IMA
Coordinator, IMA RTA & Emergency Committee